

BUSINESS WEEK

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The Navy rolls its own
off the ways at Kearny.

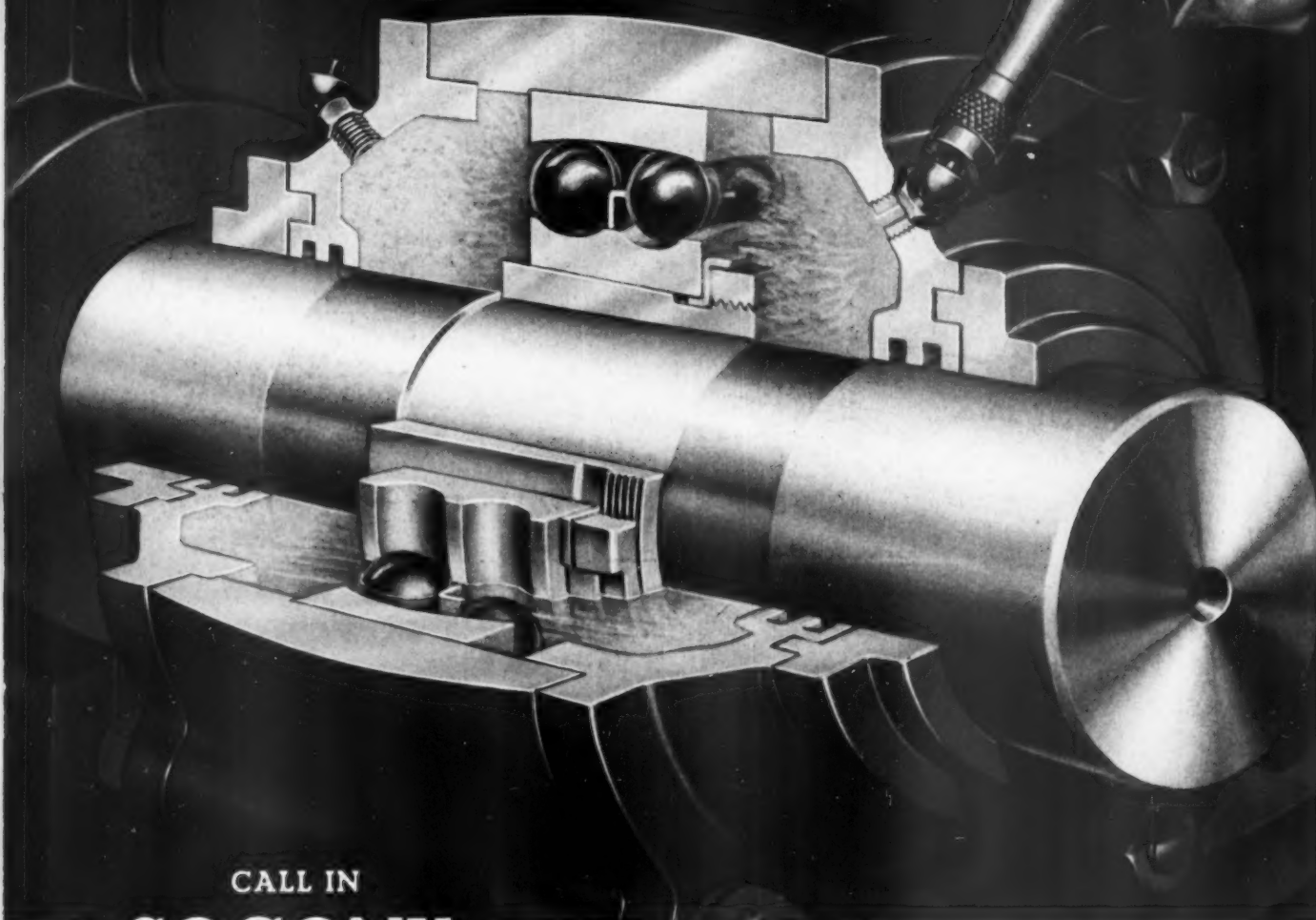
BUSINESS
WEEK
INDEX

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1

Ammunition for Defense!

THIS GUN FILLS BEARINGS WITH A NEW-TYPE GREASE TO PROTECT MACHINES FROM FAILURE



CALL IN
**SOCONY-
VACUUM**

for Correct Lubrication

Pioneers
for 75 Years

IN CORRECT LUBRICATION

1866-1941



THE MAN behind this grease gun is an important member of your staff.

His job is simple. But the grease he uses directly affects your output.

The cutaway picture above shows how a new-type Gargoyle grease assures this ball bearing of *Correct Lubrication*.

As the balls roll, they work the grease into a fluid—shown by the darker gold color above. This fluid forms a film that helps protect precision-finished bearings from wear, rust and corrosion. This results in low power consumption.

The lighter gold color represents a stiff shell of idle grease surrounding the fluid core. This shell prevents leakage and the entrance of dirt.

Here is just one more example of how Socony-Vacuum is using its 75 years' experience to help industry save costs and maintain vital defense production.

SOCONY-VACUUM OIL COMPANY, INC.—Standard Oil of New York Div.—White Star Div.—Lubrite Div.—Chicago Div.—White Eagle Div.—Wadhams Div.—Southeastern Div. (Baltimore)—Magnolia Petroleum Company—General Petroleum Corporation of Cal.



"Fire when ready, Gridley — you can't puncture those tires!"

A typical example of B. F. Goodrich leadership in truck tires

UNCLE SAM'S ARMY can't stop to change tires when it has work to do, so, as part of its national defense job, B. F. Goodrich is making bullet-sealing tubes for truck tires. High caliber bullets, rifle or machine gun, go right through these tires but there's no worry about flats.

Thousands of regular B. F. Goodrich Truck Tires are being used by the army, too. The same "First in Value" tires that are the choice of America's truck owners for their everyday jobs.

And what makes these tires so outstanding? Why are they selected for the toughest jobs? Well, take for example the new Speedliner Silvertown, the tire that on one operation after another is today delivering 25% more mileage

than even our own great Silvertown of 1940. This tire is built on a new principle. It wears far longer than conventional type tires because it has far more rubber in the tread—where you need it. The tread is thicker, heavier, flatter, deeper-cut so that it gives more mileage and greater resistance to both impact and skidding.

And the compounds in both tread and body are fortified with Duramin, the amazing B. F. Goodrich chemical discovery which fights wear, prolongs tire life.

This new tire contributes to national defense directly through its military service and indirectly everywhere because it conserves rubber supplies. The

Speedliner provides more mileage per pound of rubber.

At your B. F. Goodrich Dealer's or B. F. Goodrich Silvertown Store you can see this new 25% more mileage tire that sells at regular prices. If your dealer should be short of stock in your particular size, remember, national defense comes first.





A New Development

REPUBLIC SHOCK-ABSORBER CONVEYOR BELT

Impact- destructive enemy of conveyor belts handling heavy lump material in mines, quarries,

on construction projects, etc.—has long been showing up in the form of punctures in the rubber belt covers and subsequent rupture of the fabric plies. Trouble was, the force of impact was confined to a closely localized area . . . would strike the fairly stiff wear surface and be immediately transmitted through the underlying breaker to the hard belt body.

Republic's newly patented* development, Republic Shock-Absorber Conveyor Belt, effectively overcomes this damaging effect . . . adding in an almost unbelievable degree to belt service life. Basic principle is a specially compounded layer of soft, resilient, cushioning rubber which has the necessary properties to spread and dissipate shock force. **REPUBLIC RUBBER DIVISION OF LEE RUBBER AND TIRE CORP., YOUNGSTOWN, OHIO.**

*U. S. Patent No. 2,237,173

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BUSINESS WEEK

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Page	Description	Credit
14	J. J. Pelley	Press Assn., Inc.
15	Floyd Odum	Press Assn., Inc.
16	Shell-Loading Plant	Acme
22	Sit-Down	Press Assn., Inc.
38	B-17E	Press Assn., Inc.
42	Auction	York Studios
47	Young and Davis	Press Assn., Inc.
59	James Carey	Press Assn., Inc.
65, 66	Pierce Houses	Eric Baker
78	Russians	Acme, Press Assn., Inc.
81	Morris Wilson	Harris and Ewing

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BUSINESS WEEK • SEPT. 13, 1941 • NUMBER 628

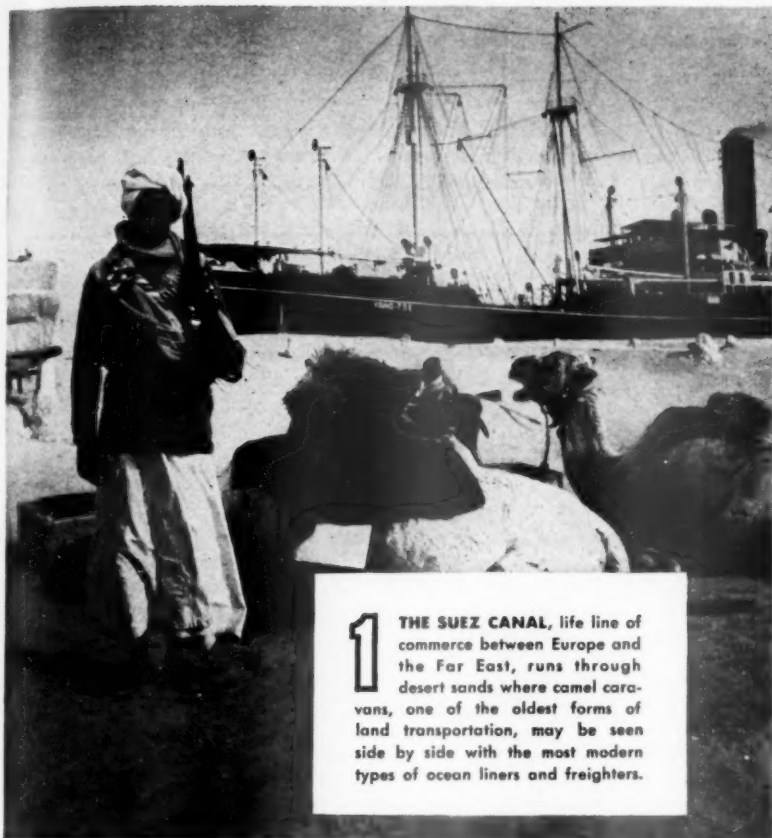
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A McGRAW-HILL

PUBLICATION

FAMOUS LIFE LINES



1 THE SUEZ CANAL, life line of commerce between Europe and the Far East, runs through desert sands where camel caravans, one of the oldest forms of land transportation, may be seen side by side with the most modern types of ocean liners and freighters.



2 YOUR CAR'S FUEL LINE, life line of dependable motoring, is probably made from Bundyweld Copper-coated steel tubing. In fact, an average of twenty parts on most cars and trucks are Bundy tubing.

ALL DAY, every day, at home or at business, you make use of "famous life lines" by Bundy.

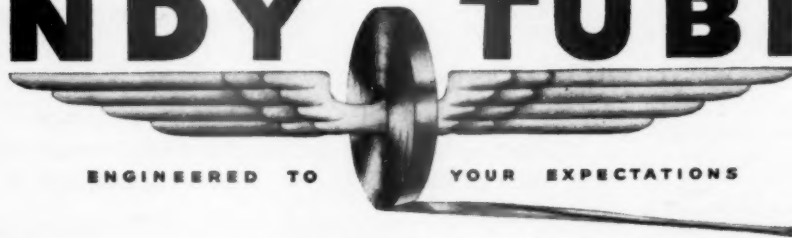
Your morning's shower and coffee, your cold drink from the office water cooler and your cold salad for lunch, that cold glass of milk at midnight and the air conditioner in your bedroom, probably all get their heat or their coldness from fuel distribution tubes or refrigeration condenser tubes of Bundy tubing.

And these are but a few of the multitude of points where you make a daily contact with Bundy tubing. Wherever fuel, or lubricants, or refrigerants must be

carried, or hydraulic pressure transmitted — whether it be for household appliances or gigantic automatic machine tools — there you are apt to find Bundy tubing. For industry has learned that Bundy tubing is the *right* tubing for strength, for ductility, and for resistance to vibration fatigue.

If you use tubing in volume production — whether you prefer to buy commercial lengths or complete, fabricated parts, ready to install — you will want Bundy's complete story. Ask for a call from a Bundy representative — Bundy Tubing Company, Detroit.

BUNDY TUBING



ENGINEERED TO YOUR EXPECTATIONS



BUNDYWELD double-walled steel tubing, hydrogen-braced, copper-coated inside and outside. From Capillary sizes up to and including $\frac{1}{4}$ " O. D. This double-walled type is also available in steel, tin-coated on the outside, and in Monel.



BUNDY ELECTRIC WELD steel tubing. Single-walled — butt welded — annealed. Also furnished tin-coated outside if desired. Available in sizes up to and including $\frac{3}{4}$ " O. D.



BUNDY "TRIPLE-PURPOSE" MONEL tubing. Double-walled, rolled from two strips, joints opposite, welded into a solid wall. Available in all Monel, Monel inside — steel outside, and Monel outside — steel inside. Sizes up to and including $\frac{3}{4}$ " O. D.



**You show your
credentials —
*or you don't get in!***

THERE'S no chance for anyone to slip in the back way—no opportunity to sneak blueprints or other valuable material out of the plant without approval—when the plant is enclosed with U-S-S Cyclone Fence. Day and night Cyclone protects your plant from saboteurs, marauders and thieves. It stops trouble *before* it begins.

Today thousands of plants all over the country — vital key plants, such as airplane factories, shipyards, oil refineries — are protected with Cyclone Fence. In fact, more plant owners choose Cyclone than any other property protection fence. Does *your* plant need this protection? If so, call in a Cyclone expert. He'll gladly give you the benefit of his experience — help you decide how best to make your plant and equipment safer. There's no obligation whatsoever.

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(American Steel & Wire Company)
Waukegan, Ill.

Branches in Principal Cities

United States Steel Export Company, New York

32-Page Book on Fence

Send for this free book. Crammed with facts, specifications, illustrations. Shows 14 types—for home, school, playground, business. Whether you need a few feet of fence or 10 miles, you need this book. Buy no fence until you see what Cyclone has to offer.



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Address.....
City..... State.....
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Approximately feet.



BUSINESS WEEK

and the ANNALIST

Sept. 13, 1941

GUIDEBOOK TO PRIORITIES

In the Sept. 20 issue of Business Week, from Washington where priorities are made and from industry where their impact is felt, an explanation of and report on the operation of the priorities system. Practical guidance for executives on the new management job that they face in dealing with priorities, price controls, and civilian shortages.

THE COVER

Delayed by a strike which made Federal Shipbuilding & Drydock Co. the first firm to have its plant placed under full government operation, the cruiser Atlanta went into the water as the United States Navy prepared to go into the war.

BREAK FOR THE SMALL BUSINESS MAN

The whole system of spreading defense contracts and subcontracts has been re-designed—it's had its face lifted, its name changed. Directing agency is now a full-fledged division of OPM—the Division of Contract Distribution; at its head is Floyd B. Odum, high-powered Wall Street executive. The Army and Navy have stepped into line. It's all been done to get smaller manufacturers in on the defense job—page 15.

"THIS LITTLE PIG WENT TO MARKET"—

If the Department of Agriculture has its way 79,300,000 little pigs will go to market in 1942, an all-time record. The U.S. is feeding Britain now, and the plow-under days are over for hogs, vegetables, dairy products, edible oils. The goals the D. of A. has set in its plan for feeding 10,000,000 extra people—page 16. Note well: The production stepup does not include such staples as cotton, wheat, and tobacco. Defense is giving the D. of A. its long-awaited chance to deflect acreage from these to truck garden crops and dairy products.

BUSINESS ABROAD

For two years now, as war has made steady inroads on the normal commerce of the nations, political considerations have outweighed usual trade factors by a steadily widening margin in determining the course of business abroad—our business with foreign countries, their business at home. This change has been constantly mirrored in Business Week's foreign news department, "Business Abroad." For an appraisal of each week's international developments of chief significance to business executives, see the weekly leading article in this department—page 78.

WHERE TO FIND IT

Washington Bulletin.....	7	New Products.....	71
Figures of the Week.....	11	The Monthly Index.....	73
The Outlook.....	13	Commodities.....	73
Marketing.....	36	Finance.....	74
Regional Market Outlook.....	54	Business Abroad.....	78
Labor and Management.....	58	Profit and Loss.....	85
Housing.....	62	The Trading Post.....	87
Production.....	66	The Trend.....	88

WASHINGTON BULLETIN

FOR BUSINESS BY BUSINESS WEEK'S WASHINGTON BUREAU

Nelson's Show

Donald Nelson has real authority to run the Supply Priorities and Allocations Board. The President will retain only veto power on the biggest and broadest defense policies, leaving it pretty much to Nelson himself whether or not he emerges as a modern Baruch.

Within the SPAB he will have a pretty free hand; as a matter of fact, it would be difficult to pick a seven-man board less apt to cramp its executive director than the one which emerged from Judge Rosenman's Solomon-like solution of that fight.

No Opposition

Vice-President Wallace, as chairman of SPAB, will not throw wrenches into the machinery in order to win personal glory. The risk is too great, when his position as heir apparent in 1944 is considered.

Stimson and Knox are pretty much just window dressing.

Hopkins is merely F.D.R. himself, having no interests to advance save those of his chief—and his chief wants the whole thing to succeed.

Knudsen is delighted because the move is a face-saving one for OPM; he is anxious to get along with his own job, production, and has no wish to embarrass Nelson.

Hillman, who has incurred the bitterness of both A.F.L. and C.I.O. because they feel he has consistently neglected labor's interests in handling the defense job, no longer packs the political punch to function as a big-time obstructionist, even if he wanted to—and there is no sign of that.

Henderson, perhaps more than any other defense official, has consistently seen eye to eye with Nelson. Even if this weren't so, Henderson's price-control moves have aroused so much antagonism on Capitol Hill—particularly in the strong farm bloc—that to put his head up in opposition to Nelson would be poor policy.

• **"The Man"**?—More and more people are agreeing with Baruch who first dismissed SPAB as a "faltering step forward," then, after a talk with Nelson, said, "This may be the man."

Simplify or Standardize?

Internal rivalry for control of the simplification-of-products program is coming to a head with indications that business-minded OPM executives will win out over Miss Elliott's Consumer

Division in OPA. To manufacturers who are vitally concerned this means that simplification will win over standardization.

OPM's bid for full jurisdiction waited this week only on final selection of a man to head up an expanded Conservation Unit. Probable appointee is Lessing J. Rosenwald, ex-board chairman of Sears. Given this set-up, the odds are heavily in favor of simplification—curtailment of model variety by individual manufacturers—rather than standardization, involving agreement by manufacturers to standardize on a single model or model series to be made by all, as proposed by Miss Elliott in the case of refrigerators.

Donald Nelson, ex-vice president of Sears, is the champion of simplification of merchandise lines and is dead-set against standardization.

• **Notable Absentees**—Neither Sears nor General Motors has been represented at Miss Elliott's conferences with refrigerator manufacturers. Without Coldspot and Frigidaire, the standardization program stumbles badly.

Repair Priorities Set

Temporary provision is made for repair work in certain essential industries and public services in a priority plan replacing the complicated system issued Aug. 8 but never actually put into effect. As far as it goes, the plan sets up a fully automatic system of tying A-10 to orders for repair parts and emergency inventory on hand to meet actual or imminent breakdown in service. Concerns in industries covered by the order need simply certify to suppliers that purchases come under terms of order P-22.

OPM calls the repair order an interim measure until the entire inventory problem can be studied and particular treatment applied to specific industries. The interim rating applies to 20 groups of industries, but leaves a number of essential services out in the cold. For instance, telephone, telegraph, and transit are included but not gas, light, and water. Others covered are fire and police, highway maintenance, carriers (except air transport), chemicals, coke converting, educational institutions, explosives, farm machinery and equipment, food processing and storing, highway maintenance equipment, hospitals (including clinics and sanatoria), lumber, metallurgy, mines and quarries, newspapers, petroleum production, refining and transportation, radio (excluding home receivers), research laboratories, rubber and rubber products, ship-

yards and ship repair yards. The first special industry priority program, covering air travel, followed the general list by one day. Others will follow.

SPAB Straddles Pipeline

Oil Coordinator Ickes may get his pipeline eventually, but in denying him steel plate and hinting that it might give him seamless tubing doesn't hold out much hope now. National Tube, the only company that can make the 24-in. size, is up to its chin in bomb and shell orders.

Tip on SPAB's estimate of the urgency of the need for steel and other critical materials for armament now is the rejection of a Tennessee Eastman Corp. proposal to build a plastics plant. This would have required large amounts of stainless steel and other materials but would have had an output capable of replacing 8,000,000 lb. of aluminum, 18,000,000 lb. of chrome nickel-plated steel, 6,000,000 lb. of stainless steel, and 34,000,000 lb. zinc.

How Many Tankers to Britain?

Number of tankers transferred to the British is both a closely guarded military secret and the real key to the East Coast petroleum situation. A month ago, however, it was determined that the number then was 43 (BW-Aug. 9 '41, p. 16). Now it may be assumed that the number has almost doubled, for Deputy Coordinator Davies this week released a letter from 11 major oil companies revealing that transportation facilities for 400,000 bbl. per day have been diverted. Since one tanker can haul an average of 5,000 bbl. of oil a day from the Gulf to North Atlantic ports, Davies' statement would indicate that about 80 tankers have been transferred.

Some time ago, the industry estimated it could avoid the threatened shortage (page 14), if no more than the first 50 tankers were taken. It looks now as though an additional 30 or so have gone, and that is what is causing all the trouble.

Explaining Plane Record

August production of 1,854 planes, 400 above July, was far better than expected. It puts production within two weeks of being on the schedule set last fall. The greater part of the increase was in combat planes, which totaled close to 1,000. Of these better than half were pursuit and other light types, about 150 were light bombers, 250

medium bombers, and perhaps 70 heavy bombers.

September production can't be expected to register another such increase, may even decline slightly, because while part of the August rise was accounted for by the new plants just now coming into operation, a good share was the result of production in previous months which had not shown up in the statistics. For several months, planes that were finished, except for propellers, have been standing around at Martin, Lockheed, Bell, and other plants. In August, a big flock of propellers came along and released these planes.

• **More Engines**—Engine production has ceased to be the bottleneck. Even the liquid-cooled Allison is now coming out at the rate of about 700 a month. The similar Rolls Royce which Packard is building is just coming into production and will be available in some quantity by the first of the year, at 800 a month by spring.

Protecting "Old Faithfuls"

Two hitches have developed in reconciling House and Senate versions of the tax bill. In preliminary discussions, House conferees have been holding out for the special 10% excess defense profits tax on low-earning corporations, holding out against the Senate's proposal to reduce exemptions on personal income taxes. House members are not opposed to creating new taxpayers by lowering exemptions—but there is considerable opposition to the further increases imposed on existing taxpayers which would also result from the exemption reduction. Of the \$303,000,000 which would materialize by reducing married persons' exemptions from \$2,000 to \$1,500 and single persons' from \$800 to \$750, only \$47,000,000 would be contributed by new taxpayers. Existing taxpayers would account for the balance. So now House conferees are looking for a way to enlist new taxpayers without soaking the "old faithfuls."

Opening Up on Fair Trade

Thurman Arnold's long-predicted blitzkrieg on the state fair-trade laws permitting the establishment of fixed retail prices, is rolling at last. Wholesale and retail drug associations, including the national bodies that are credited with getting the laws on the statute books of 45 states and state associations in New Jersey and Pennsylvania, have been smothered under a flood of subpoenas, returnable Sept. 22 and 23 in Newark, where a grand jury is sitting.

Association records of all kinds—letters, speeches, minutes of meetings, price lists, published articles—are being requisitioned and, because of the mass of evidence which the Antitrust Division

will have to wade through, the case isn't likely to go before the jury for a good many months to come. The division already has a considerable amount of material on hand as a result of the dragnet which it threw out in the summer of 1940, subpoenaing the records of other drug and cosmetic groups. Evidence gathered in that drive never went to a grand jury, but this time Arnold means business, and you can look for other actions involving other areas and other products.

Insulin Case Showed Way

It's generally assumed that the present attack stems directly from the price-fixing action which Arnold brought against U. S. insulin makers last spring (BW—Apr. 5 '41, p8), a case that ended with Squibb, Lilly, and Sharp & Dohme all pleading nolo contendere. Other pending actions involving the fair-trade laws include the cement and building materials case in Denver (BW—Mar. 29 '41, p8) and the electrical and gas appliances action in Los Angeles (BW—Apr. 26 '41, p45).

• **Line of Attack**—The fair-trade laws have been upheld by the Supreme Court; so Arnold can't tackle them directly. He can only charge illegal action in the drafting and enforcement of otherwise legal contracts. The state laws, backed by the Miller-Tydings national enabling act, permit a manufacturer to set prices on his goods, but the Sherman Act still forbids collusive action on the part of manufacturers in setting prices or on the part of retailers and wholesalers in forcing producers to issue and police price contracts.

Light Bulb Suit Ends

Arnold wound up another patent monopoly suit this week. Admitting no guilt but refusing to defend themselves against charges of criminally conspiring to prevent importation of electric light bulb jackets into the United States from Holland, the General Electric Co., Corning Glass Works, the Netherlands firm of N. V. Philips Gloeilampenfabriken, and six of their officials agreed to pay fines totalling \$47,000, imposed by the U. S. District Court for the Southern District of New York. The Antitrust Division's civil price-fixing suit against the domestic light bulb industry (BW—Feb. 1 '41, p23) is still hanging fire.

Globe-Circling Pan American

Pan American Airways' projected commercial and ferry service to Africa takes the system two-thirds of the way 'round the world. It is anticipated that, before the war ends, PAA will close the 8,100 mile gap between Leopoldville in the Belgian Congo and Hong

Kong. The African operation is a part of the Anglo-American war effort but almost surely it will continue after the war. Pan American now becomes more than ever a quasi-governmental agency, involved in international relations, in strategic commerce, and on the margin of actual combat.

Ship Repair Drive

John E. Otterson's optimistic report this week that the national ship-repair situation is "well in hand" under the supervision of his new Office of Coordinator of Ship Repair and Conversion tells only the American side of the repair story. Britain is making headway, too. Marine salvage experts, just home from there, declare that extensive salvage operations have put back into service nearly twice the volume of new tonnage that Britain is able to build with present shipyard capacity. That would mean that upwards of 2,000,000 tons had been raised in shallow waters, towed to drydocks for repairs, and returned to service. Repairs in some of these cases required less than a week.

• **More Salvage Ahead**—One official, scouring this market for additional salvage equipment, declared he knew the locations of 40 beached vessels that could be put back into service quickly if pumps and other refloating equipment can be secured quickly.

Priorities and Strikes

No immediate need remains for the priority control slapped on industrial alcohol Aug. 30, but it will probably stick. It was imposed when a strike in the Pennsylvania Alcohol Corp. plant held up deliveries on 700,000 gal. for smokeless-powder production and the Army wanted to farm out the contract to other producers booked up with commercial orders. The strike was settled Aug. 30, before the contract was re-allocated. Precedent for invoking priorities in a strike situation was set in the case of the strike at Trona, Calif., affecting borax production (BW—Aug. 9 '41, p61). The order placing borax and boric acid under control was withdrawn following settlement of that strike.

Defense officials, with expanding powder production ahead, may take the long view and keep alcohol on the list.

No Railroad Strike Seen

The prospect of a railroad labor strike is exceedingly remote. The setting of a strike date by the railway unions is simply a gesture made in order to start mediation machinery rolling. Under the Railway Labor Act sixty days must elapse before a strike, and it isn't likely even then. A compromise on wages and working rules is in the cards.

FIGURES OF THE WEEK

THE INDEX (see chart below)

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
Steel Ingot Operations (% of capacity)	96.9	96.3	95.6	98.8	91.9
Automobile Production	32,940	39,965	41,795	125,915	39,665
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$18,865	\$16,782	\$29,339	\$20,952	\$14,398
Electric Power Output (million kilowatt-hours)	3,096	3,224	3,196	2,986	2,592
Crude Oil (daily average, 1,000 bbls.)	3,815	4,005	3,912	3,633	3,624
Bituminous Coal (daily average, 1,000 tons)	1,813	1,792	1,750	1,798	1,512

TRADE

Miscellaneous and L.C.I. Carloadings (daily average, 1,000 cars)	91	89	87	81	76
All Other Carloadings (daily average, 1,000 cars)	61	61	61	45	52
Check Payments (outside N. Y. City, millions)	\$5,020	\$5,286	\$5,816	\$5,620	\$3,731
Money in Circulation (Wednesday series, millions)	\$10,034	\$9,899	\$9,795	\$8,805	\$8,092
Department Store Sales (change from same week of preceding year)	+29%	+29%	+27%	+5%	+10%
Business Failures (Dun & Bradstreet, number)	145	200	220	241	177

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	218.0	214.3	211.9	178.0	156.0
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	145.3	144.2	144.8	128.1	111.6
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	162.9	158.3	152.8	127.6	116.3
Iron and Steel Composite (Steel, ton)	\$38.15	\$38.15	\$38.15	\$38.26	\$37.81
Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$20.33	\$19.92
Copper (electrolytic, Connecticut Valley, lb.)	12.00¢	12.00¢	12.00¢	12.01¢	11.38¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.12	\$1.08	\$1.06	\$0.80	\$0.74
Sugar (raw, delivered New York, lb.)	3.50¢	3.50¢	3.78¢	3.20¢	2.70¢
Cotton (middling, ten designated markets, lb.)	17.37¢	16.74¢	15.95¢	10.43¢	9.51¢
Wool Tops (New York, lb.)	\$1.315	\$1.295	\$1.257	\$1.298	#
Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.78¢	21.64¢	19.34¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.)	81.1	81.8	80.9	79.3	84.8
Medium-Grade Corporate Bond Yield (30 Baa issues, Moody's)	4.27%	4.28%	4.27%	4.40%	4.69%
U. S. Bond Yield (average of all issues due or callable after twelve years)	1.91%	1.92%	1.93%	2.05%	2.20%
U. S. Treasury 3-to-5-year Note Yield	0.31%	0.32%	0.33%	0.52%	0.50%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6-months, N. Y. City (prevailing rate)	1%	1%	1%	1-1%	1-1%

BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks	24,349	24,453	24,217	23,362	20,901
Total Loans and Investments, reporting member banks	29,238	29,107	28,761	26,668	24,188
Commercial and Agricultural Loans, reporting member banks	6,222	6,183	6,087	5,287	4,480
Securities Loans, reporting member banks	1,043	885	901	957	853
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks	14,567	14,608	14,553	13,232	11,957
Other Securities Held, reporting member banks	3,768	3,802	3,611	3,844	3,665
Excess Reserves, all member banks (Wednesday series)	4,860	4,990	5,020	6,435	6,494
Total Federal Reserve Credit Outstanding (Wednesday series)	2,241	2,281	2,231	2,237	2,490

* Preliminary, week ended September 6th.

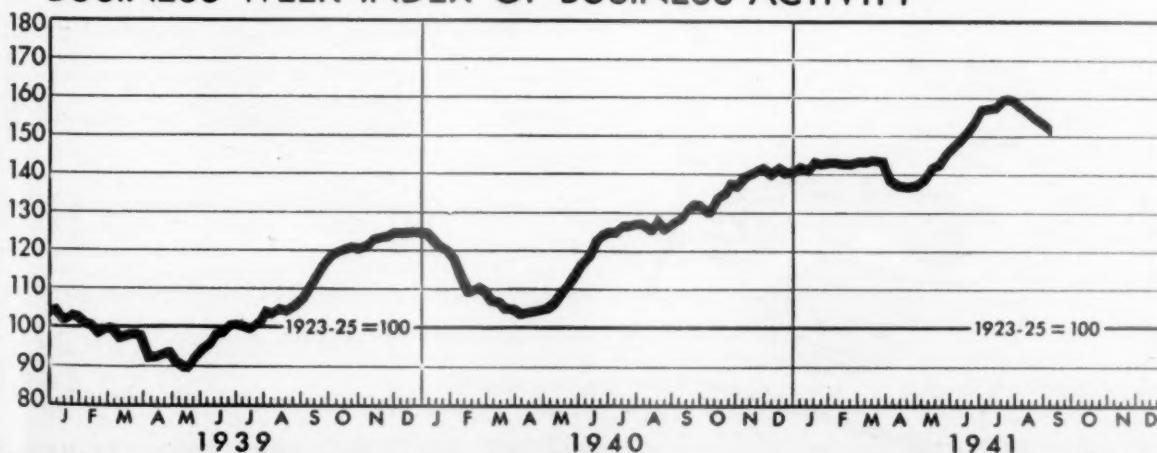
† Revised.

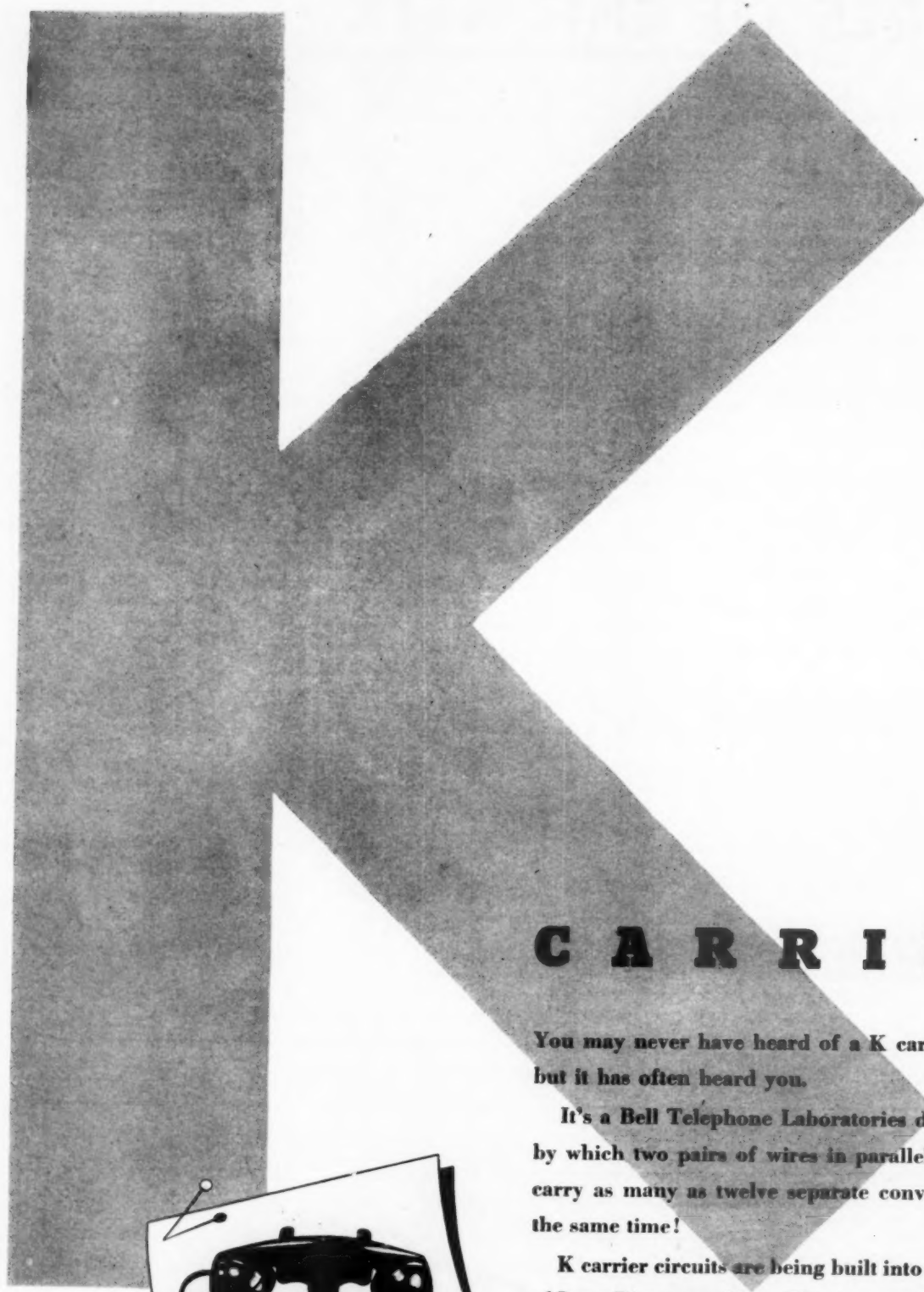
§ Date for "Latest Week" on each series on request.

Not available.

‡ Ceiling fixed by government.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





K C A R R I E R

You may never have heard of a K carrier circuit, but it has often heard you.

It's a Bell Telephone Laboratories development by which two pairs of wires in parallel cables can carry as many as twelve separate conversations at the same time!

K carrier circuits are being built into many miles of Long Distance cables. *This is one of the ways we have of adding a lot of long circuits in a hurry to meet the needs of national defense.*



★ **LONG DISTANCE** helps unite the nation

THE OUTLOOK

Farmer in the Limelight

His cash income is only 5% less than in 1929, his buying power is better than it was then, and prospects for 1942, with expanded production, are even brighter.

One of the very bright spots in a currently rosy business picture is the farming situation. The cash income of farmers during the last half of 1941 will run a billion dollars or more ahead of the same period of 1940. During the first half, the gain over last year was half a billion, so that 1941 will go into the record with cash income of better than \$10,600,000,000, compared with \$9,120,000,000 for 1940.

This will be the highest figure since 1929 and only some \$600,000,000, or about 5%, under that year. Moreover, in point of farm purchasing power, 1941 has a nice edge over 1929. For, though farmers currently may have 5% fewer actual dollars, their dollars are going about 15% further on the average.

Next Year Even Better

Even more interesting, however, is the farm outlook for next year. The Department of Agriculture estimates that we will be called upon to export enough food to feed about 10,000,000 people, that our shipments to Britain alone may run from 6% to 8% of our total agricultural production (page 17). Even though acreage of some of our most important cash crops—cotton, wheat, tobacco—will continue to be curtailed due to existing surpluses, over-all farm output will be the highest in the history of the country. With prices high and going higher, 1942 stands to be the best year for farm income since 1920.

More Milk and Hogs

Among the biggest beneficiaries of the 1942 boost in farm production will be the areas specializing in livestock raising and dairying. Dairy products in 1941 probably will make up a 1½-billion-dollar slice of farm cash income. Next year the Department of Agriculture wants a jump of 8% over record 1941 milk production, and, as prices are sure to be higher next year than the 1941 average, dairymen should take in around \$2,000,000,000. Big milk-producing states of the densely populated Northeast and Great Lakes regions will get 50% or more of this total.

The corn-hog belt will be another area benefiting greatly from the 1942 agricultural program, for there will be a need for at least 8,000,000 more pigs than this year's slaughter of about 71,-

000,000 head. If those additional pigs go to market weighing an average of 250 pounds—and they probably will do better—they will mean an addition of \$225,000,000 to livestock income without considering the fact that prices will probably figure out a little higher next year.

The gains to be counted for poultry also will be large, and both cattle and sheep income will be up although not quite so spectacularly. The effort to bring more fruit and vegetables to market will make these, along with oil-yielding peanuts and soybeans, the headline crops.

About the only thing that detracts from this farm situation is the fact that a few of the industries which normally

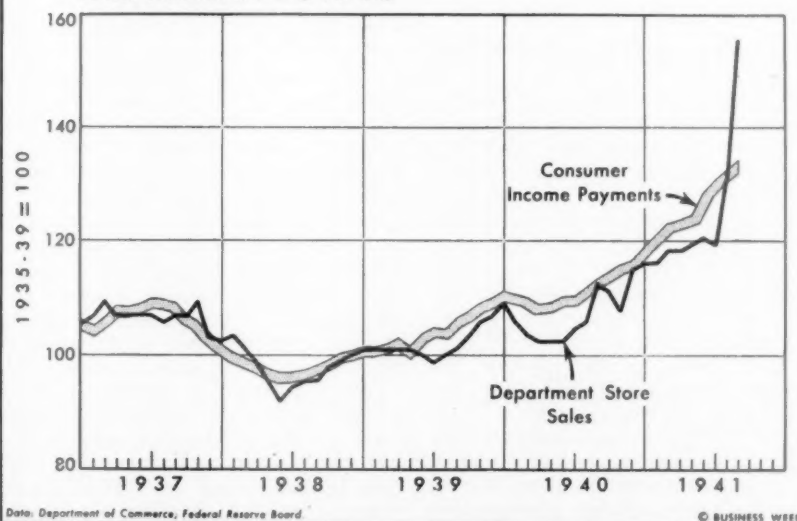
serve the rural market will have less goods to sell. Notable, of course, will be the case of automobiles. Farm implement people, on the other hand, have received an A-10 priority rating to help them get their raw materials—and farmers will be more anxious than ever to mechanize, due to the acute shortage of labor and to high wages.

Zinc Shows Improvement

Some day, of course, there will come a little relaxation in the tight situation now surrounding most of the industrial raw materials so that more will be available for manufacturing civilian goods. Industrialists, eager to detect such a turnabout, probably were encouraged by the August zinc statistics which revealed a new record for production at 75,500 tons and another modest increase in stocks on hand.

Ability of zinc smelters to turn out more metal than is being used in each of the last three months should not be the cause of too much jubilation, however, for military demand has by no means reached its peak.

IN THE OUTLOOK: CONSUMER BUYING



Normally, consumer purchasing at department stores keeps pretty close pace with the volume of income payments to individuals—salaries, wages, dividends, farm income, etc. Thus the August buying wave (BW—Aug. 23'41, p33), which jumped the seasonally adjusted index of department store sales by a record 20 points, was by no means a normal phenomenon. As the buying panic wears off, the

sales index may be expected to slide back toward the income figure. Yet in coming months, as defense requirements pinch off much of the supply of automobiles, electric appliances, and other durable consumer goods, purchasing power will be diverted to many of the "soft" lines which loom large in department-store volume. Moreover, fear of shortages will continue to pad the retail sales figures.



J. J. Pelley, president of the Association of American Railroads, doesn't know what all the shouting's about over a gas shortage in the East. Last

week he told the Senate investigating committee the railroads have 20,000 surplus tank cars which could be put into service to end any shortage.

Pipeline Doomed?

Lineup has changed and it looks as though other methods, possibly concrete barges, will be used to end gas shortage.

The \$75,000,000 crude-oil pipeline, planned to link Texas production and East Coast consuming areas, threatened with shortage, was all set to go with the passage of the Cole bill last month giving such lines the right of eminent domain. Oil companies had allocated the money for the cooperative project. Engineers were busy with the drawings. Priorities for the necessary steel seemed assured.

Now, however, the picture has change—changed so much that the building of the line is definitely in the doubtful category, a circumstance highlighted this week by refusal of SPAB to grant priorities on the steel plates for its construction. Events and opposing interests and personalities have lined up strongly against the project. For example: On the Senate committee investigating the shortage is Senator Lee O'Daniel of Texas. In discussing the proposed 24-in. crude line, Senator O'Daniel asked a witness what would be done with the line after the emergency was over.

"Well," was the response, "it might be used for a natural-gas line."

Senator O'Daniel's jaw went grim. The picture of a two-foot pipe delivering Texas natural gas to eastern indus-

trial centers is repugnant to Lone Star leadership. Texas is ambitious to become a greater manufacturing state, wants its cheap gas employed within its own borders to that end.

• **Reasons against It**—Other factors working against the pipeline are: (1) The time element. The line couldn't be finished in less than nine months and by that time the present stringency would be past. (2) The steel shortage. (3) The possibility that railroad tank cars could solve the problem. (4) Suggestion for the use of reinforced concrete oil barges to meet the emergency.

The concrete sea-going barge idea was proposed to the Senate committee investigating the oil shortage by Rear Admiral Emory S. Land, chairman of the Maritime Commission. The commission is receiving bids on such barges (BW—Aug. 9 '41, p. 8), expects to have 100 of them delivered at the rate of 20 a month starting in January. Admiral Land said his 100 barges would require 110,000 tons of steel against 750,000 tons for the pipeline and added that if the pipeline steel was to be taken from ships, he was against the project. He also declared that 25 new tankers to be delivered by April 1 (before completion of the pipeline is possible) would make up for the diversion of tankers to aid Britain.

• **Railroad Opposition**—Best organized objection to the proposed crude pipeline is that of the railroads. They back up their opposition to this competing carrier with the assurance that rail tank cars can render the line unnecessary by meeting the entire shortage. J. J. Pelley, president of the Association of Ameri-

can Railroads, told the Senate committee, that there was a surplus of 20,000 tank cars which could be brought into service. He figured that they could deliver 200,000 bbl. of oil daily to the East Coast, eliminating the shortage estimated at 174,000 bbl. a day.

Mr. Pelley made his statement in the face of less optimistic comment by Ralph K. Davies, deputy petroleum coordinator, before the same committee. Mr. Davies complained that the railroads supplied generalities when he asked about surplus tank cars: "When one pursues the question of idle equipment with railroad people, one finds a tank car to be one of the most elusive things imaginable."

• **The Figures**—Statistics, however, are in Mr. Pelley's favor. Out of a total of 150,000 tank cars, 125,000 are used for hauling petroleum products. Two thirds of this 125,000 are owned by leasing companies, one third by oil companies. It is admitted that there may be 20,000 of these cars available (though contrary estimates go as low as 10,000), and it also is acknowledged that these 20,000 could, if utilized to the utmost, deliver 200,000 bbl. of petroleum daily.

The industry generally stands pat on an American Petroleum Industry report of last May. It pointed out that in order to get sufficient deliveries from the tank cars, the five-day shipping week would have to give way to the seven-day week with prompt loading and unloading to include Saturdays, Sundays and holidays, plus the utmost speed in transit. But numerous "ifs" remain. Many doubt claims by the railroads that they have sufficient motive power to haul this extra traffic. It is also claimed there just isn't room on the rails at terminals for the estimated 30,000 cars per month (1½ trips monthly by 20,000 tank cars).

• **More Expensive**—Cost is another draw-back to use of tank cars. It takes 1½¢ to bring a gallon of gasoline from the Texas Gulf to northeastern ports by tanker; 5½¢ for the same gallon between the same points by rail. (Pipeline costs are about 30%–40% higher than tanker, but much lower than rail.) The oil companies affected have increased their use of tank cars and have simply absorbed the extra cost. The railroads are attempting to shorten the margin by reducing freight rates; they have agreed to cut tank-car rates for gasoline and fuel oils by about 25% and to cut the rates on crude by as much as 50%.

Oil men wearily deny sensational stories that there are sinister motives behind their proposed \$75,000,000 pipe line. It has been charged that the plan was cleverly framed to deliver another sock at railroad transportation. "But," ask the oil executives, "why should we put all this money into the pipeline when tankers will do the job for less after the war?"

Small Man Wins

Program to give him more defense jobs goes into action as Odlum takes over and Army and Navy are lined up.

The White House has at last turned the spotlight on the big job that little business men can do for defense. In the space of a few days, OPM's Defense Contract Service—its face lifted and its name changed—was suddenly catapulted into nationwide prominence with the announcement that Floyd B. Odlum, high-powered head of Atlas Corp., Wall Street investment trust, would head the supercharged organization. Mr. Odlum, who is well regarded by New Dealers generally, has the President's backing on a job that was permitted to languish until Washington was slapped in the face by the fact that if more defense work is to be done, more people will have to do it—do that or do nothing, because of the dwindling supply of materials for commercial output.

The Army and Navy have been directed by presidential order to cooperate with Mr. Odlum and his OPM Division of Contract Distribution. This gives punch to plans already laid for contracting and subcontracting a much larger volume of work to small concerns. The toughest job that OPM's Defense Contract Service has had to do in months past was to sell the Army and Navy on utilizing small-shop facilities.

• **Services Lined Up**—Only recently had the Army and Navy at last subscribed to a working agreement with OPM on the methods to be employed to spread defense work (BW—Aug. 23 '41, p. 15). Just



Floyd B. Odlum went to breakfast with Harry Hopkins Sept. 5, stopped in at the White House, came out with a job as head of OPM's Division of Contract Distribution.

this week the War Department announced new regulations on contract awards to carry its part of the agreement into effect. OPM's Defense Contract Service was lifted out of the Production Division and made directly responsible to Knudsen. The Army and Navy set

up "matching" agencies—in the Army, the Contract Distribution Division, headed by Lt. Col. Ray M. Hare, in Under Secretary Patterson's office; in the Navy, the Defense Contract Service Bureau, headed by Lt. Comdr. E. P. A. Simpson, under Capt. Charles W.

Where Priorities Pinch Hurts

Here's the list of towns which, in the judgment of OPM's Labor Division, are seriously threatened with enforced shutdowns and unemployment as a result of the operation of the priorities system. Popularly, this list has been referred to as the list of one-industry towns. That's a considerable misnomer. Only a few of the cities listed below could be said to depend principally on a single industry and that industry one which is likely to be seriously affected by material shortages. Meadville, Pa., (slide fasteners) and Newton, Ia., (electric washers) are such towns. Where OPM's Labor Division included on the list cities of highly diversified industry—Lorain, Ohio; Racine, Wis.; Rockford, Ill.; for example—it evidently had in mind specific shortage-hit companies which figure importantly in the local economy. Just which companies may be deduced from the industry which the division has noted against each city-name on the list.

Officials of the newly reorganized Defense Contract Service, now known as the Division of Contract Distribution, and OPM's Labor Division, together with field staffs of the United States Employment Service, are making on-the-spot surveys of the situation in the selected communities. On the basis of these surveys, plus reports from industry and labor unions, the Priorities Branch of OPM's Labor Division will make recommendations to the Division of Contract Distribution, which in turn will certify the communities to the Army and Navy for special consideration in the awarding of defense contracts. In at least three communities where the dominant industry was threatened by priorities trouble, Manitowoc, Wis. (Aluminum Goods Mfg. Co.), Newton, Iowa (Maytag washing machines), and Mansfield, Ohio (Westinghouse electrical appliances), defense contracts have already rolled in to take up the slack.

California

Culver City (stoves)

Illinois

Algonquin (washers)
Aurora (metal furniture)
Belvidere (sewing machines)
Belleville (stoves)
Freeport (pumps)
Galesburg (machine shops)
Kankakee (stoves)
Lemont (aluminum ware)
Litchfield (machine shops)
Quincy (stoves)
Rockford (sewing machines)

Indiana

Evansville (refrigeration, machine shops)
Kokomo (stoves, electrical appliances)
Muncie (machine shops)

Iowa

Fairfield (washers)
Kellogg (washers)
Newton (washers)
Webster City (washers)

Massachusetts

Gardner (stoves)
Orange (sewing machines)
Springfield (electrical appliances)
Taunton (stoves, aluminum ware)

Michigan

Grand Rapids (metal furniture, refrigeration, vacuum cleaners)
Greenville (refrigeration)
Muskegon (auto accessories)

Saginaw (machine shops)

Tecumseh (electrical appliances)

New York

Jamestown (metal furniture)
Long Island City (slide fasteners)
Utica (machine shops)

Ohio

Dover (vacuum cleaners, electrical appliances)
Lorain (stoves)
Mansfield (refrigeration, heating elements)
New Washington (aluminum ware)
North Canton (vacuum cleaners)
Sandusky (washers)
Sidney (aluminum ware)

Pennsylvania

Meadville (slide fasteners)
Warren (metal furniture, electrical appliances)
Waynesboro (refrigeration)

Tennessee

Franklin (stoves)
Lewisburg (stoves)

Texas

Temple (metal furniture)

Wisconsin

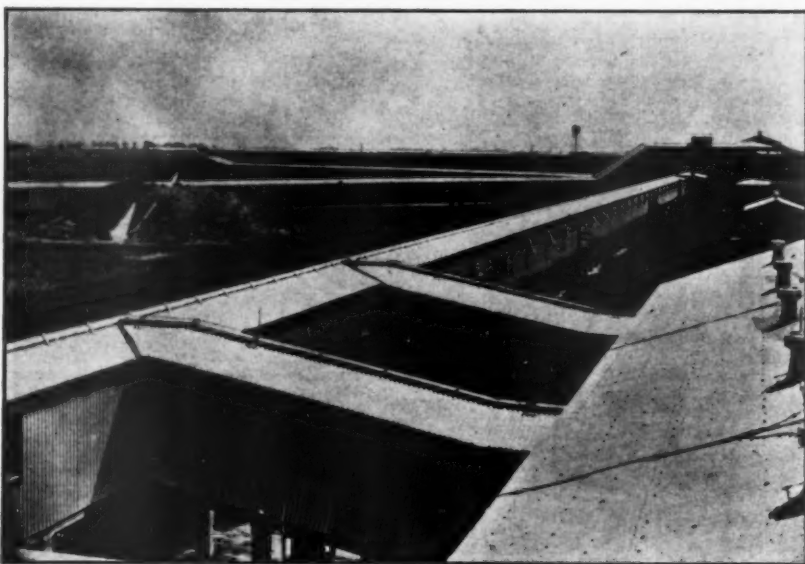
Fond du Lac (typewriters, refrigeration)
Manitowoc (aluminum ware)
Racine (electrical appliances)
Ripon (washers)
West Bend (aluminum ware)



SHELL-LOADING

The \$30,000,000 Elwood (Ill.) Ordnance Plant, which covers several thousand acres, and will eventually employ 8,265 workers, is already known as "the largest shell and bomb-loading plant in the world." Each one of its hundreds of shell-loading rooms—where workmen pour amatol, a mixture of ammonium nitrate and TNT, through funnels into 155-mm. howitzer shells (above)—is in a build-

ing by itself. The buildings are separated by reinforced concrete walls and long stretches of prairie, and are connected by long conveyors (below). Both buildings and conveyors have corrugated asbestos siding, calculated to give way during an explosion in order to relieve pressure and minimize injury to workers. There are grass-grown shelters (left, below), like cyclone cellars, which workers are supposed to take to during fires and electrical storms. And they do too.



Fisher, director of shore establishments. Mr. Odum (with John Whitaker of Atlas Corp., lately of Henderson's staff, as his executive assistant) takes over an organization that now ranks as a division of OPM and Robert L. Mehornay, the man who finally succeeded in organizing and gaining recognition for it, retires to

the furniture business in Kansas City. • **Mehornay Crossed Hillman**—Need for a big name advertising the fact that Washington now is awake to the plight of the small manufacturer and his employees is one explanation given for Mehornay's retirement. Another is that Sidney Hillman had a hand in ousting

him. Mehornay had resisted Hillman's wish to put labor representatives in the Washington office and the 39 field offices of the Defense Contract Service. The executive order issued by the President directs that a representative of OPM's Labor Division shall be assigned to the main office and each field office. Such representatives are to be responsible to Hillman, not to Odum; they are directed to cooperate with such offices in the Labor Division's effort to find re-employment for workers in plants whose production is curtailed or eliminated by shortages of materials.

Mehornay's friends say that he first heard the news that Odum had been named to replace him on the radio Sept. 4 after he had assisted Judge Lessing J. Rosenwald and officials of OPM and the Budget Bureau in drafting the executive order setting up the Defense Contract Service as the Division of Contract Distribution.

• **More Financial Aid**—The division's budget for the current fiscal year has been boosted to finance the stepped-up program. Main office funds have been increased from \$130,000 to \$240,000; field office funds from \$1,500,000 to \$2,400,000. The staff in main and field offices will be strengthened with more industrial and production engineers.

Permanent exhibits of "bits and pieces," the parts needed for Army and Navy ordnance, will be assembled in all offices of the Contract Distribution Division. Display also will include items wanted by Quartermaster and other branches to the extent that space permits, so that would-be contractors and subcontractors can have a look at them, decide what they can make best.

• **Shopping List Out**—A shopping list of Army Ordnance items was sent to 39 OPM field offices this week. This covers material wanted under the ordnance division's new \$2,889,000,000 program and includes shells, bombs, gun carriages, guns, gun mounts, fire control equipment, pistols, and rifles.

• **Where to Ask**—The OPM offices where this "shopping list" will be available to responsible plant owners are located in Federal Reserve Banks and branch banks in the following cities: Atlanta, Baltimore, Birmingham, Boston, Chicago, Cleveland, Dallas, Denver, Detroit, El Paso, Helena, Houston, Kansas City (Mo.), Little Rock, Los Angeles, Louisville, Memphis, Nashville, New Orleans, New York, Oklahoma City, Omaha, Philadelphia, Pittsburgh, Portland (Ore.), Richmond, Salt Lake City, San Antonio, San Francisco, St. Louis.

Other OPM offices where the list will be available are as follows: Buffalo, 212 Traders Bank Bldg.; Main and Swan Sts.; Charlotte, New Liberty Life Bldg.; Cincinnati, 804 Union Trust Bldg.; Des Moines, 505 Crocker Bldg.; Jacksonville, 504 Hildebrandt Bldg.; Milwaukee, 1124 First Wisconsin National Bank Bldg.; Minneapolis, 240 Rand Tower Bldg.; Newark, 176 Sussex Ave.; Seattle, National Bank of Commerce Bldg.

Farmers' Big Year

In fact, 1942 will be the biggest in history. D. of A. sets goals, not cuts. To feed 10,000,000 under lease-lend.

In agriculture as in industry the slogan is more production for defense and for shipment to the countries resisting aggression. The farmers of America are being called on by the Department of Agriculture to feed an additional 10,000,000 people in 1942 (BW—Aug. 23 '41, p14). But several of the country's most important cash crops are not included in the speed-up campaign, notably cotton, wheat, and tobacco.

The needs of Britain became apparent early enough so that a start could be made on the campaign in 1941 (BW—Apr. 12 '41, p72). The program for 1942, however, is much broader. The Department of Agriculture's crop statisticians and its dietary experts were given the problem on the assumption that we will have to produce food for the additional 10,000,000 people. They've come up with estimates of requirements, and a series of conferences to acquaint farmers with the story will start next week with a two-day meeting in Salt Lake City.

• **Largest in History**—Secretary of Agriculture Claude R. Wickard launched the campaign on Monday when he called for a big boost in production of livestock, livestock products, and vegetables. It's the first time in the history of American agriculture when goals have been set on the output of all our important products, and the goals call for the largest production in history.

One of the biggest problems of the Department of Agriculture, as it tries to steam up the production program, is to avert the plowing of thousands of sub-marginal acres as was done during the last war. From this point of view, it's fortunate that the foods most needed are mostly livestock and livestock products. Feed for the hogs and the cows and the chickens is plentiful so that only a modest increase in acreage of corn, oats, barley, hay and grain sorghums is contemplated in the program (table, page 18).

• **Another Wheat Cut**—Averting an increase in acreage also is made easier by existing large surpluses of cotton and wheat. Wheat is second only to corn in this country as a big-acreage crop, and the program as outlined envisions a further sharp cut in wheat planting. Cotton has been squeezed down to the minimum set forth in the 1937 farm law, but there might be some curtailment from the present level on a voluntary (plus inducement) basis as was the case this year.

Britain's need for edible oils is clearly visible in the goals set on peanuts and soybeans. Acreage of peanuts is put at 1,600,000 for general purposes but an additional allowance of 1,900,000 acres is provided for those farmers who will agree to use the harvest from these acres for oil. And soybeans are allotted 7,000,000 acres compared with 5,550,000 for 1941 and an average of 3,433,000 from 1936 through 1940.

• **Edible Fat Supply**—Output of cottonseed oil cannot be expanded much due to the continued curtailment of cotton acreage. Lard, however, will greatly supplement the supply of edible fat available for lease-lend shipment to Britain. If the 1942 goal of 79,300,000 hogs for slaughter is reached (compared with a 1936-40 average of 63,196,000 head), it will mean topping the previous all-time record of 77,500,000 in 1923. And, if the corn-hog ratio is maintained on a favorable basis so as to encourage good finishing, there'll be plenty of fat on the carcasses to render into lard.

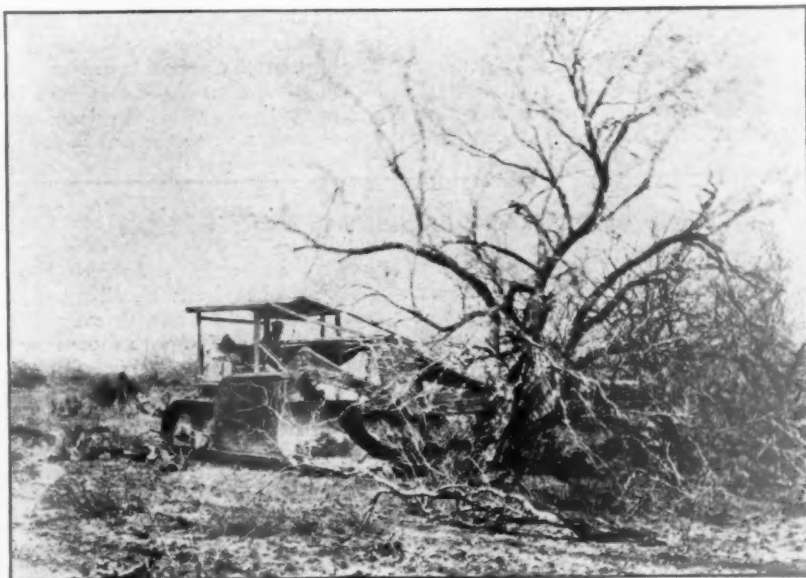
Amplitude of the feed supply will have an important bearing, too, on the big production increases scheduled for milk, eggs, and chickens. The D. of A. has been stressing increased production of these items for months, and a further

big jump is asked in 1942. Cheese, dried and evaporated milk, shell eggs, and dried eggs are prominent on the weekly lists of purchases by the Surplus Marketing Administration, which handles distribution on both the stamp plan in this country and lease-lend shipment. While it isn't shouted from the house tops, SMA has been buying a good bit more of such items as these than actually are covered by Britain's requests—just to be on the safe side.

• **Milk Record**—Consequently, it's no surprise to see that Secretary Wickard calls for another all-time record in milk production. The goal here is 125,000,000 pounds, which would compare with an estimated 116,809,000,000 for 1941, itself a record. For eggs, the goal is put at 4,000,000,000 dozen against 3,676,000,000 this year.

When it comes to fruit—and Britain is yelling for its vitamins—the Department of Agriculture can't do much about increasing production because that takes too much time. However, it is committed to a program of "better distribution and prevention of waste," which presumably means there will be no dumping of fruit along roadsides to rot because of unsatisfactory prices.

On vegetables, however, a modest



MESQUITE KILLER

When Capt. Richard King in 1852 bought the first 69,000 acres of what has since expanded to the 900,000-acre King Ranch, most of the land was in the natural sod of the Texas coastal plain. Since then, mesquite has taken over scores of square miles. Now, with a rising demand—and rising prices—for beef, the land is going back into good pasture—fast. Clearing it by hand cost six man-days per

acre. But now a 95-h.p. Diesel Caterpillar tractor with a treedozer (above), clears off standing mesquite—or with a knife rooter clears off running mesquite—at \$1.40 per acre. One contractor is working 20 hours a day clearing 25,000 acres a year, and is increasing his equipment. Once the mesquite is dead, the land is seeded to Rhodes grass, an African plant. Cleared land in Rhodes grass will support one beef critter per 3 to 6 acres, as against 15 to 30 acres for uncleared grazing.

increase in acreage is advocated. For use as fresh produce Secretary Wickard calls for 1,935,000 acres compared with 1,843,000 in 1941; for canning, 1,500,000 acres compared with 1,487,000.

• **Farm Gardens**—An interesting point—and you'll hear a lot about it later—is the goal for farm gardens. The Department wants 5,760,000 of these next year, compared with 4,431,000 in 1941. The next step, and it's been planned for months, is a campaign for home gardens. This will be accompanied by a drive to get housewives—in towns, in cities, and on the farms—to go back to the old habit of home-canning most of the winter's needs. That will free a lot of tinned tomatoes and beans for export that otherwise would be needed in this country.

It will be but one short step from that to pasturing a few sheep in the front lawn as was so common back in 1918.

Incidentally, this campaign for more production doesn't mean a swing away from the farm policy that has guided the Agricultural Adjustment Administration over the years. This can be seen from the effort to prevent any large, over-all rise in cultivated acreage. The point can further be demonstrated by citing the restrictions on wheat, cotton, and tobacco.

• **Sum of the Parts**—What it adds up to is this: The Department of Agriculture has been living in hopes that it could some day boost production rather than hold it down. Prior to 1940 there wasn't

enough domestic demand at appropriate price levels for farm produce to permit much increase. In fact, it was largely a matter of helping farmers to hold their crops off the market in order to bolster prices. Now, however, the Department of Agriculture can offer 85%-of-parity loans on all the crops it needs to meet larger domestic consumption plus exports to friendly nations.

Secretary Wickard, not to mention his Undersecretary, Paul Appleby, are Wallace men. They're not scuttling the policies of their old boss. They're just making the most of the emergency to bolster farm income—and even to work off some of the ever-normal granary's long-standing surpluses.

Defense Flying

Airlines' survey showing that 67.5% of travelers are on business buttresses argument for maintaining equipment.

As a result of their nationwide, eight-day survey of air-passenger travel (BW—Aug. 30'41, p28), the airlines have an impressive array of statistical data to present to anybody who will listen—particularly anybody in Washington. The air transport people have been concerned about their plight ever since the government requisitioned planes and turned them over to the British (BW—

Jul. 19'41, p20). Now, they hope to use their new data as evidence for the argument that air transport is an important adjunct to business and defense and that, therefore, airline equipment should not be curtailed any further.

Final tabulations of the survey, which was taken from Aug. 1 to Aug. 8 by members of the Air Transport Assn. of America, show that 67.5% of air travel during the period was for business reasons, only 32.5% was for personal reasons, despite the fact that the vacation-travel season was at its height. On principal routes, 81% of passengers were traveling for business reasons. About 10% of all passengers questioned were government representatives, and 62.5% of them were on government business.

• **Lack of Space**—During the survey, the 16 lines recorded they were unable to accommodate 7,186 persons because of lack of space—which would amount to almost 30,000 people a month; or some 20,250 persons who wanted to fly for business reasons.

On the most-heavily traveled air routes, ratio of business to pleasure travel was even higher than the over-all national figure in all cases but one. Load factors (passenger seat miles to available seat miles) on these routes were unusually high, considering that a year ago a 65% load factor was considered almost the absolute saturation point. Figures on these routes:

	Business Travel	Load Factor
New York-Chicago	72.3%	74.8%
New York-Boston	65.6	74.7
New York-Washington ...	78.7	74.7
Washington-Detroit	80.0	66.2
Washington-Chicago ...	77.5	79.9
Washington-Los Angeles ...	81.0	77.4
New York-Los Angeles ...	67.6	73.6
New York-San Francisco ...	68.1	76.5

The survey shows that executives and technicians of 100 heavy defense producers increased their use of air travel 62% in June, 1941, over the same month a year ago.

USED-STOCKINGS DISPUTE

There's a quiet little skirmish going on along the sidelines of the big silk shortage scare. The dispute started in the early days of the silk crisis when the trade magazine, Knit Goods Weekly, suggested that a campaign get under way to collect discarded silk stockings for reuse in powder bags. The idea caught on. Then OPM burst this patriotic bubble with the flat announcement that salvaged silk stockings were no good for powder bags in any form.

Knit Goods Weekly got its back up and, in its Aug. 25 issue, presented lengthy technical evidence to support its contention that between 50% and 60% of all used silk hose could be converted into yarn for powder bags. This evidence was forwarded to Washington, but in spite of it OPM still says absolutely no soap.

Feeding the Forces Resisting Aggression

If we're going to have an extra 10,000,000 people to feed next year, it will take a lot of scheduling of farm output. The Department of Agriculture has been working on the

problem for weeks, and here's the blueprint of agriculture's all-out defense effort for 1942 (with comparisons with earlier years to show how much added output is entailed):

Commodity	1936-40 Average	Estimates, 1941	1942 Goal
Milk (lb.)	106,640,000,000	116,809,000,000	125,000,000,000
Eggs (doz.)	3,400,000,000	3,676,000,000	4,000,000,000
Hogs (head)*	63,196,000	71,000,000	79,300,000
Beef, veal (head)*	24,850,000	25,100,000	28,000,000
Chickens (number)*	644,000,000	680,000,000	750,000,000
Lamb, mutton (head)*	21,902,000	22,400,000	22,900,000
Corn (acres)	93,980,000	87,363,000	90,000,000
Oats (acres)	36,992,000	38,197,000	40,000,000
Barley (acres)	12,881,000	14,813,000	14,500,000
Hay (acres)	69,025,000	73,933,000	75,000,000
Cotton (acres)	27,858,000	23,519,000	23,000,000
Wheat (acres)	72,049,000	63,503,000	55,000,000
Tobacco (acres)	1,640,800	1,376,500	1,370,000
Peanuts (acres)	1,736,000	1,908,000	3,700,000
Soybeans (acres)	3,433,000	5,550,000	7,000,000
Flaxseed (acres)	1,696,000	3,228,000	3,230,000
Sugar (acres) .....	.....	1,085,000	No Limit
Rye (acres)	3,533,000	3,436,000	3,450,000
Rice (acres)	1,047,000	1,186,000	1,200,000
Dry beans (acres)	1,880,000	2,220,000	2,220,000
Potatoes (acres)	3,132,000	2,988,000	3,060,000
Sweet potatoes (acres)	836,000	843,000	850,000
Commercial vegetables			
Fresh use (acres)	1,824,000	1,843,000	1,935,000
Processed (acres)	1,319,000	1,487,000	1,500,000

* Figure in each case indicates number of head of livestock for slaughter.

"HERE I AM, IN LOVE WITH A MACHINE!"



• "I never realized an adding-calculating machine could be the answer to a maiden's prayer! Maybe it isn't love, exactly — but I do have a crush on that new Model M Comptometer!

• "Well, why not? Together, we turn out figure work in *record time* — addition, subtraction, multiplication, division! And I mean *accurate* figure work — because when I 'fumble' a key stroke (and every operator does that occasionally), the Comptometer's exclusive *Controlled-Key safeguard* locks the keyboard until I've corrected the error!

• "Those no-glare answer dials make it easy to read off answers accurately, too — and just think, there aren't any zeros to clutter up the answer dials unless they're part of the answer! Together, that Comptometer and I can handle any figure-work assignment (flexibility, the Boss calls it).

• "The Boss says that he knows now that those Comptometer ads he's been reading are right, when they say the Comptometer handles *more figure work in less time at lower cost!*"

Your local Comptometer Co. man is prepared to show you — in your own office, on your own work — how Comptometer *machines* and Comptometer *methods* can effect substantial economies in the handling of your figure work.

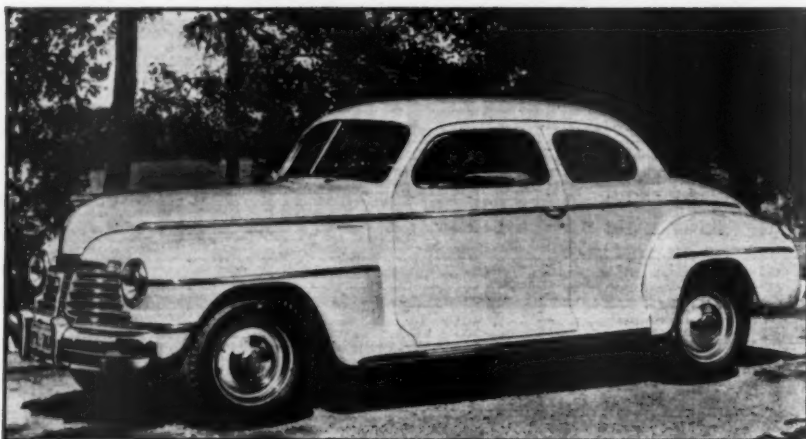
Telephone him . . . or, if you prefer, write to Felt & Tarrant Mfg. Co., 1733 N. Paulina St., Chicago, Ill.

COMPTOMETER

REG. U. S. PAT. OFF.

ADDING-CALCULATING MACHINES





The 1942 special deluxe Plymouth has had its rear-axle ratio reduced, and its horsepower raised to 95 to effect greater economy. Amola steel, a carbon-molybdenum material, has been used to save nickel steel for defense.

And, like most of the other early 1942 models, it's been decked out with showy brightwork; touched up with stunts like white metal rings on the wheel rims, to make motorists forget the old verboten white sidewall tires.

New Cars Arrive

The 1942-model parade starts with a glitter and reveals that defense hasn't killed selling in the auto industry. Prices climb.

The big automobile show of 1941 is the exhibition of selling strategy by the automobile manufacturers. How they are accommodating themselves to the necessities of the defense program but hanging on to the old sales "oomph" is now being revealed in the start of the parade of 1942 models—if you look behind the routine reports on the parade.

• **Style Changes**—Willys, Hudson, Packard, Plymouth, Studebaker, and Nash have shown their 1942 wares to the public. What the public has seen is that, with the exception of Packard, which has adopted its Clipper styling to all of its production models, style changes have been largely confined to front-end modifications and the lavish use of brightwork on exterior trims. Plymouth and Hudson bodies are out-flared to conceal runningboards, in keeping with a previously-established trend.

More marked style changes will be revealed in the latter half of September and early October by General Motors and Ford divisions. Fisher Body has developed a more overhung and rakish body shell that will be used on some of the G. M. lines. In the Cadillac manner, other G. M. divisions will have the front door flared as a continuation of the front fender; in some cases the rear door will be flared into the rear fender. A fundamental body change for Lincoln-Zephyr is reported—along with intro-

duction of an automatic transmission. Ford will have a longer and wider car. But the general tendency is to hold steady on style.

• **Mechanical Changes**—A routine report will add that most of the 1942 models have some mechanical improvements. Plymouth has raised its horsepower to 95, Dodge to 105, and Packard engines have been stepped up 5 hp. To effect greater economy, Plymouth, Dodge, and Nash have reduced rear-axle ratios. To save cost, Nash has replaced its famous twin-ignition principle with a new high-turbulence combustion chamber system which has stepped up performance. Hudson's "Drive-Master," an optional extra, is new in design. The clutch is operated by one vacuum cylinder and the gearshift by another, the proper sequence of operations being performed by a mechanical governor and controls. A three-button switch gives the driver the option of (1) automatic gear-shifting, (2) semi-automatic operation, or (3) a manual shift. The car won't creep at the traffic light. Studebaker has introduced the "Turbo-Matic" drive, which consists of a fluid coupling with an automatic clutch and overdrive transmission. This optional drive eliminates the clutch pedal, places a range selector, or shift lever, on the steering column. There is no creep when standing still and an interlock prevents starting the engine while in gear.

• **A Shining Start**—That's the routine report on the model-change trends but more notable than any of these details—and more revealing of the fact that the traditional sales sense hasn't been lost in the defense rush—is the news that, in the Detroit vernacular, the 1942 models are "dolled up like Christmas trees." Die-cast grilles, lamphouses, and exterior

AUTO PRICE TAGS SHOW ADVANCES

While business men watch the 1942-model parade to see what kind of sales strategy it reveals and how good a display of salesmanship the automobile industry can put on in face of the defense program, John Public and his wife are likely to look first at the price tags on the models in the parade. Taking as examples retail list prices in Detroit, less state tax and license, they'll see that the tags uncovered are marked 8.5% to 27% higher than a year ago on automobiles which carry about the same amount of equipment plus the usual yearly styling and mechanical improvements.

On this Detroit delivered basis, for instance, a Dodge 2-door deluxe (standard) model that cost \$890 in early 1941 and went up to \$925 and \$935 in the spring will now carry a dealer's quotation of \$1,040; Hudson models ranging from \$765 to \$1,003 last year are now being marked from \$945 to \$1,267; Studebaker Champions have jumped the 1941 starting price by \$75, Commanders and Presidents by \$100, now going at from \$875 for the 2-door Champion six to \$1,280 for the 2-door President eight; Plymouth's 2-door deluxe (standard) moves to \$930 from \$779 a year ago and \$809-\$824 in the spring, while its 2-door special deluxe moves to \$990 from \$840 a year ago and \$877-\$892 in the spring; Willys' 4-door sedan, at \$875, is up approximately \$100 from the 1941 price; Packard is putting out a new Clipper special six on a 120-in. wheelbase delivered in Detroit for \$1,250 against \$1,056 for its Special Six on a 122-in. wheelbase a year ago (with its Clipper eight on the 120-in. base going at \$55 over the price of the six).

Prices on the new models are those quoted by dealers, since the factories generally regard their price schedules as tentative and subject to rapid change. Also, they have to think of Washington and Leon Henderson.

ornaments have disappeared to save zinc, but in their stead has come an even more lavish use of stainless steel or chromium-plated steel in grilles, fender moldings, door-sill moldings, and body-belt moldings. There are even bright metal rings for wheel rims to give the effect of those banned white-walled tires.

Sales sense has seen to it that so much

Here's Relief



from Close
Stuffy Air!

Carrier Room Ventilator



2. No Draft Arguments. From office boy up, new Carrier Room Ventilators make the whole force cheer. No drafts—winter or summer. Yet even from corners—stale, stuffy air is whisked out of the room—replaced with clean, bracing air. You work harder and feel like doing things.



4. In Home or Office, a smart new Carrier Room Ventilator is something to be proud of. Dissipates smoke and odors, it turns "on" and "off" at the flick of a switch. Your Carrier Dealer will give you a complete trial demonstration in your own home or office. *Special pollen filter for hay fever sufferers* As low as **\$64⁰⁰**



1. Sleep Like a Log—wake up clear-eyed, with a smile on your face and a spring in your walk. This Carrier Room Ventilator makes your bedroom a new world of comfort . . . no cold drafts . . . no outdoor noises . . . provides just the right amount of clean and bracing outdoor air for healthful, restful sleep.



3. Doctor's Orders. Here's the world's best cure for rooms suffering from an overdose of dust, dirt, or smoke. All of the air is filtered all of the time. In winter, layers of heated air are broken up and diffused throughout the room. You live in an even temperature and are less likely to get colds.



A New Development by Dr. Willis H. Carrier and his Associates

. . . enjoy these 12 big benefits

1. Positive ventilation.
2. Filters outdoor and recirculated air all the time.
3. Subdues outside noises.
4. Mixes outdoor and indoor air in any desired proportion.
5. Banishes dust, dirt, soot, insects.
6. Ventilation reduces smoke and odors.
7. Portable.
8. Protects furnishings and family from open windows.
9. Tempered air in winter.
10. Prevents open-and-shut window arguments.
11. Aids personal efficiency.
12. Brings in cool night air.



Air Conditioning's First Name—

Dr. Willis H. Carrier "invented" air conditioning. Thanks to controls and techniques developed by him and his associates, air conditioning has opened a new world for you in the comforts you enjoy, the things you eat and wear, the way you live and work.

Carrier

Carrier Corporation, Syracuse, N. Y. Desk 11BW
"Weather Makers to the World"

Without obligation, please send new booklet "What Are You Breathing" giving complete information on the new Carrier Room Ventilator.

Name
Address
City State

defense didn't make new models a dull subject at the start of the new season, despite the fact that the materials-substitution program of the automobile industry has grown to tremendous proportions. The latest report on this program shows that, without further changes in production schedules for the first six months, it will save 81% of the nickel steel formerly required, 93% of the primary aluminum, 30% of the secondary aluminum, 97% of the magnesium, 71% of the zinc, 29% of the chromium, and 74% of the tungsten. But it hasn't taken the glitter out of the opening scene at which the public forms its opinion of the year's show.

• **But Changes Are Coming**—Explanation given for this is that the companies' designs for sales-stimulating brightwork were figured out long before the current difficulty in getting stainless steel, chromium, and nickel, and that the industry got a complete go-ahead from the government when the original designs were made. But you can make a postscript of the fact that, with the shortages now existing, much of the brightwork on these early 1942 models will be stripped off by the first of the year and its place taken by paint or plastic.

Other changes are in prospect. For example, foam-rubber seat cushions are still available, but are likely to be replaced soon by cotton batting. Plastics are getting more use in interior ornamentation, noticeably by the Chrysler divisions, but it can't be said that the industry has gone hog-wild on plastics.

Interior appointments include die-cast handles and considerable plated metal.

• **Iron for Aluminum**—For those who fear sacrifice of quality, factory spokesmen are emphasizing statements that the 1942 models are capable of running longer periods at lower operating and maintenance expense than preceding models. There's much talk about closer tolerances, generally improved manufacturing methods. If you worry about the substitution of cast-iron for aluminum pistons, you'll hear that engineering advances made in recent years should dispel any such worries. The situation on the actual changeover, so far as reported, is that Plymouth and Willys are already using iron pistons; Chevrolet has used them for 21 years; Pontiac has always used them; Cadillac, Buick, Nash, Oldsmobile, Packard, and Studebaker will have aluminum pistons for a time, make changeovers to iron or semi-steel without fanfare. The changeover is mainly a matter of getting sources of supply ready.

One notable change behind the glitter at Detroit is in the direction of saving nickel steel for defense. Plymouth and other Chrysler divisions have expanded their use of Amola steel—a carbon-molybdenum material, for which we have abundant alloying material. Studebaker has taken up Amola in the last two or three years. Auto men who have tried it say that it functions as well as nickel steel but has been held back by inability of the steel mills to produce it in large enough quantities.

General Motors, out for the same saving for defense needs, moved into the low-chromium steels at the outset of the emergency and for ten years or more Chevrolet has pushed the development of high-grade carbon steels to save the expense of alloy materials. The industry as a whole counts on its experience and technical skill to get steels that will do its job regardless, though the shifts in processing techniques may cause inconvenience or added expense.

Amphibian Tanks

It's an easy step for Food Machinery Corp. to make new "Alligators", which travel on land or sea, for the Navy.

When eastern stockholders of the Food Machinery Corp. attended a regional luncheon meeting last week in New York City, their interest centered principally on finding out how their company got into the business of building amphibian tanks for the Navy. The story goes back about five years to a time when Donald Roebling, a Florida inventor, began work on what he planned would be a rescue vehicle that would travel on land, on water, and through swamps and dense underbrush. When he got to the building stage, he went to the manager of Food Machinery Corp.'s Dunedin, Fla., plant and got use of some of the factory's facilities.

Roebling was just finishing his first model (BW-Jul.27'40,p17)—a squat, 8,000-lb., aluminum monster, capable of doing some 23.5 m.p.h. on land and 9.75 m.p.h. in the water—when the defense program came along. The tank's value in difficult terrain was apparent when, in tests, it plowed through 8-in. mangrove trees, climbed 3-ft. vertical banks, and went from land to water and water to land with only a difference in speed.

• **What Interested the Navy**—The Navy immediately became interested in the 20-ft. "Alligator" as an aid to putting landing parties ashore under fire. Strategy would be to carry the tanks aboard ship, merely hoist them overboard in shallow water. With an armored control cab and an open, truck-like body, they carry about 30 men with equipment.

The amphibian moves on continuous tracks, constructed with very deep treads which cut deeply into mud and earth on land and supply a kind of paddle action that propels the craft through the water. It is not equipped with a propeller. The vehicle is maneuvered like any track-type tractor.

When the Navy decided to order 200 of the amphibians, it signed a contract totaling \$3,200,000—or \$16,000 apiece—with Food Machinery Corp. as the



PLEASE REMAIN STANDING

Labor Day paraders from the Ford Motor Co. did a three-minute squat in Detroit streets to commemorate the sitdown strikes which introduced

the Motor City to C.I.O. militancy back in 1937. Motor company officials who witnessed the parade must have earnestly hoped that the symbolic gesture definitely marked the passing of these labor tactics.



A-ROUND-HER NECK
SHE WEARS

*Petroleum
molecules*

RINGS, bracelets, pendants, bandeaux—you never saw such a choice. They'd cost a pretty penny if carved by hand, from jade or rock crystal. But science has brought them to the dime store.

The intricate "carving" is done by a mold that turns out polished and perfect "jewels"—a dozen a minute. For scientists at Shell's research laboratories found a way to produce a petroleum product which helps make flinty-hard plastics.

Starting with crude oil, Shell scientists have produced glycerine, synthetic rubber, TNT, fertilizers, even a key product which enters Vitamin E.

Yet these important and revealing accomplishments are but by-products of their main assignment: The constant improvement of Shell fuels and lubricants.



INDUSTRIAL LUBRICATION is facing new demands as the pace of

SHELL INDUSTRIAL LUBRICATION

production is stepped up. Yesterday's solution is seldom good enough for today.

Shell's \$3,500,000 research facilities, manned by 821 scientists and assistants, exist solely to create better products, better methods.

In hundreds of instances, Shell lubrication engineers have opened the way to increased production and lower operating costs, by improving lubrication methods.

Before Shell industrial lubricants are offered to you, they are plant-tested—proved—under all kinds of actual operating conditions. And with the use of Shell lubricants, you are assured of the continued watchfulness of Shell men—a service that needs no prompting.

Are you quite sure that your plant has the benefit of all that is new in lubrication, as it develops? You will find a Shell man's recommendations entirely practical—and made without obligation.

builder of the Roebling tanks. Later, it ordered another 120 of the tanks—100 for the Navy, 20 for the Army.

• **The Change-over**—As J. D. Crummey, chairman of the board, pointed out to

stockholders, tank manufacture is not so far removed from food-machinery manufacture as might appear. About all the company had to do was put in welding equipment and a heavy crane—

since the Navy changed specifications from riveted aluminum to welded steel—and it was all set to go to work. Shortly, all tank building will be moved from the company's Dunedin plant to a new plant at Lakeland, Fla., a few miles away. Production at the new factory will be two to four tanks a day.

This new, \$350,000 plant is being privately-financed and will be amortized for tax purposes in five years as a defense plant. At the end of the emergency, the company will move all of its Dunedin equipment to Lakeland and go right on again about its business. Chairman Crummey pointed out that since the company has had the Dunedin factory written off its books for the last four years and was considering a new Florida factory anyway, building amphibian tanks was a good way to kill two birds with one stone: get some defense business, get a new factory.

• **Other Defense Business**—All told, the company is working on about \$6,000,000 in defense orders (for special machinery, ordnance items, as well as the amphibians), has an unestimated number of orders for pumps for Army camps, and has a mounting number of Army-camp orders for its new, portable "Fire-Fiter" trailer, which carries a high-pressure pump, hose, and nozzle to produce a "fog blanket" that smothers fires.

Defense Plant Expenditures

Measuring the impact of the defense program on industry is a job that will keep statisticians bent over their calculating machines for years to come. But one accessible yardstick, admittedly incomplete, is the dollar-by-dollar costs of physical plant expansion directly attributable to defense.

Up to July 31, according to figures just released by the Bureau of Research and Statistics of the Office of Production Management, the estimated cost of 2,420 defense industrial plant expansions and new projects totaled \$4,192,495,000. Of these, 523 projects were financed with public funds and accounted for \$3,293,033,000—or 78%—of the total cost; privately-financed projects totaled 1,904, costing \$899,462,000—or 22%—of the total.

Industrywise, aircraft leads in the largest dollar-value of expansions, with a total of \$885,882,000 expended on 280 projects; second was arms (am-

munition, shells, bombs, etc.) with a total of \$680,729,000 expended on 238 projects. Largest number of expansions and projects was 508 in the machinery-manufacturing industries (excluding electrical machinery) at a total cost of \$216,672,000; second-largest figure was 349 expansions and new projects in the iron and steel products industries, at a cost of \$409,815,000.

Regionally, the nation's great manufacturing belt—including the New England, Middle Atlantic, and East North Central states—was head and shoulders above the rest of the nation, with about \$2,410,000,000, or almost 60%, of the total dollar volume of all expansions. Leading state by dollar volume was Pennsylvania, with a total of \$413,296,000. The following table, prepared by the Office of Production Management, lists state-by-state total expenditures, as well as estimated expenditures of both public and private funds.

VALUE OF DEFENSE INDUSTRIAL FACILITIES,
BY STATES AND SOURCE OF FUNDS

	Total Estimated Cost (in thousands of dollars; 000 omitted)	Source of Funds	
		Public Estimated Cost*	Private Estimated Cost**
Ala.	171,577	138,050	33,527
Ariz.	91	.....	91
Ark.	32,168	31,490	678
Calif.	188,635	147,575	41,060
Colo.	32,746	31,856	890
Conn.	152,582	108,384	44,198
Dela.	1,929	1,343	586
D. of C.	9,061	9,061	.....
Fla.	2,893	2,337	556
Ga.	6,745	4,693	2,052
Ida.	555	.....	555
Ill.	233,282	197,460	35,822
Ind.	272,892	245,031	27,861
Iowa	80,669	78,493	2,176
Kan.	38,327	34,422	3,905
Ky.	44,475	28,769	15,706
La.	42,707	39,767	2,940
Me.	11,248	10,034	1,214
Md.	88,341	70,617	17,724
Mass.	101,033	81,931	19,102
Mich.	285,199	248,414	36,785
Minn.	52,441	49,495	2,946
Miss.	2,969	2,819	150
Mo.	180,705	176,462	4,243
Mont.	1,879	1,740	139
Neb.	13,151	12,404	747
Nev.	401	.....	401
N. H.	12,456	12,215	241
N. J.	168,169	128,436	39,733
N. M.	1,077	.....	1,077
N. Y.	349,122	272,247	76,875
N. C.	25,189	7,982	17,207
N. D.	279	.....	279
Ohio	364,647	267,142	97,505
Okl.	21,620	20,670	950
Ore.	11,582	9,607	1,975
Pa.	413,296	326,367	86,929
R. I.	12,244	11,083	1,161
S. C.	22,474	14,878	7,596
S. D.	134	.....	134
Tenn.	124,721	60,764	63,957
Tex.	120,141	90,806	29,335
Utah	8,227	8,215	12
Vt.	3,936	2,309	1,627
Va.	129,670	119,861	9,809
Wash.	88,362	66,642	21,720
W. Va.	113,756	86,201	27,555
Wis.	30,741	16,592	14,149
Wyo. ....	.....	.....	.....
Undesig- nated ..	110,486	8,163	102,323
Non-con- tinguous.	11,465	10,206	1,259
Total ..	4,192,495	3,293,033	899,462

* Includes facilities estimated to cost more than \$25,000 which are direct obligations of the War and Navy Departments (including financing through government supply and emergency plant facility contracts), Maritime Commission, Defense Plant Corp., British government, and loans of the Reconstruction Finance Corp.

** As reflected by certificates of necessity approved. Excludes pilot and mechanic training.

Wastepaper Drive

Paperboard producers launch advertising campaign to build supplies, ease price situation. Ceilings take effect Oct. 1.

Supplies of raw material for the paperboard industry and other users of wastepaper have presented a threat for months. Last week, as planned, the users began advertising to bring in more old paper from household, industrial, and business sources (BW—Aug. 16, '41, p8). They started off with spot announcements on four Chicago radio stations, followed these with newspaper space this week; radio spot announcements amounting to \$2,000 a week in New York City began the drive on the East Coast. Just as rapidly as arrangements can be concluded, the campaign is getting under way in a total of 32 of the largest cities east of the Rockies.

Paying the bills is the Conservation Committee of the Waste Paper Consuming Industries; handling the whole campaign is the Olian Agency of St. Louis. With no salaries or overhead, the committee has raised and banked \$141,000 from 37 board mills at the rate of 25¢ per ton of wastepaper consumed. It has guaranteed the advertising campaign for four months, at the rate of \$56,000 a month, and is hoping that roofing



G.M. FOR DEFENSE

General Motors' AC Spark Plug Division, where machine-gun production was in full swing, was just one of the stops press representatives made this week in a tour of G.M.'s defense activities—and, incidentally, its 1942 auto production lines. The tour took in the three other G.M. plants now turning out machine guns (assignments for guns total \$83,697,839, for

facilities \$26,583,306). Other G.M. defense features on parade: Allison liquid-cooled aviation engines (\$60,900,000 worth of engines, parts, and equipment have been delivered); shell production (\$7,000,000 worth delivered); oil and water coolers for mosquito boats. G.M. has delivered \$209,500,000 worth of defense orders in all; and the aggregate of orders that are assigned, or under negotiation, is now \$1,200,000,000.

mills and bookpaper mills will join to boost the kitty.

• **One-Company Scheme**—The idea started seven weeks ago, with exactly the mechanics now being used nationwide, as a one-company promotion in St. Louis by the Alton Box Co. Alton advertised at the rate of \$1,700 a month to induce people who had saved up a quantity of paper or rags to call its switchboard. The operator thereupon took the name and address and found out how much paper was on hand. The name went to the nearest junk dealer for a pickup of paper for sale, to the Salvation Army or Goodwill Industries if the caller wished to give it away. To keep the flow of names coming to him, the dealer was expected to sell this extra paper to the Alton Box Board Co.

Telephone calls started at the rate of 80 a day, have steadily mounted to 185. If this continues, by the end of the year one family out of every six in St. Louis will have called for a pickup of wastepaper. The Conservation Committee expects to spend \$60,000 to set up special switchboards in the 32 cities under solicitation.

• **The Demand Situation**—Reason for the urgent demand for waste paper is two-fold. Pulp supplies from Scandinavia

have ceased and the production ratio of the paperboard industry has risen from 84 for the week ended June 7 to 94 for the week ended Aug. 23.

For months, the mills have been buying all available waste paper, but the flowback is not enough. Statistics for 1940 show that a little over 4,000,000 tons—28% of the paper and paperboard produced in the U.S.—was returned to mills in the form of wastepaper. Of all waste materials reclaimed, paperboard mills use about 84%; roofing mills and others use 16%. An adverse factor this year is the substantial volume of paperboard exported as lease-lend packing.

• **The Squeeze**—The classical way to obtain more wastepaper is for the mills to raise the prices they will pay. But this forces a lift in board prices—if the mills can get it. The industry experienced frozen prices for board, with rising prices for wastepaper for six weeks last summer—and saw the vise squeeze the marginal mills, whose production is needed now, almost out of existence.

Wastepaper consumers think they can drag in more raw material at present prices by advertising for it than by the same outlay in the form of higher prices. Some of them expect that they can thus get as much added supply for 25¢ in

advertising as they could get for \$1 by a price boost. Also, they are thinking of the cumulative advantage in cultivating among millions of people the habit of saving and selling waste paper.

• **Prices Paid**—The price paid to householders in Chicago who respond to the advertising is 35¢ per cwt. if a truck must call, 50¢ if delivered to the dealer. Defense authorities in charge of civilian supply are actively interested in the national campaign. Thurman Arnold has unofficially blessed it by saying it is not an anti-trust violation.

Meanwhile, raw material supplies have reached the crisis stage at some points, especially in the East, where sharpshooters have riddled the voluntary wastepaper price ceiling so full of holes that it has been leaking like a sieve. Last week, Price Administrator Henderson announced that all of the more important grades would be placed under ceiling prices on Oct. 1. These prices will be set at levels that prevailed on June 16. The week before, he prodded 27 eastern users into shifting supplies to other mills which were shut down or scraping the bottom of the barrel. This was hailed by OPACS as the first diversion of privately-owned commodity inventories during the defense program.

Folding-Box Worry

Defense paperboard needs eventually may cut civilian uses by 50%. But boxmakers are skeptical of figures.

Business men who rely on folding paper boxes for packaging their products may soon be worrying as busily as their box suppliers. The boxmakers have been concerned ever since a Chicago meeting last month—and are not yet sure whether they are as worried as the circumstances warrant. A Washington meeting this week did little to make their future look brighter.

N. A. McKenna, chief of the pulp and paper section, Office of Production Management, brought to Chicago the official figures on consumption, capacity, and prospects of the paperboard industry, upon which the folding-box industry must rely for raw material. These run as follows:

	Million Tons
Consumption, normal year.....	6
Consumption, 1940.....	6.3
Production, 1941.....	8
Maximum capacity, 1942.....	9
Requirements, 1942:	
Defense needs.....	6
Civilian needs.....	6
Shortage, 1942.....	3

• **No Priorities**—For good measure, OPM says that no priorities will be issued for adding mill capacity. Doing a 12,000,000-ton job with a mill capacity

New AMERICAN REDUCTION DRIVE

**DELIVERS SPEEDS
of 11 to 154 R. P. M.**

QUICK, EASY INSTALLATION

The new American Speed-Reduction Unit mounts on the shaft of the driven machine like a pulley—and as simply and quickly. No foundation, no special engineering required. Can be used with any motor—of any make, size, or speed.

LOW-COST INSTALLATION

The net cost of the 5-Horsepower, 47 R.P.M. American Reduction Drive shown above, using an available motor, is only:

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1	6" PD 28 Wdg Belt Pulley	5.13	
1	12" PD 28 Wdg Belt	11.73	
2	3 Ft "Wdg Belts"	3.58	
1	#3 Reduction Unit	105.00	
	TOTAL		125.44

Deliver Tomorrow 8:00 A.M. SURE!

IN ADDITION

This new American Reduction Drive is designed for immediate delivery from dealers' stocks. It saves space. Can be easily relocated at any time. No maintenance—except semi-annual lubrication. Five sizes from 1/2 to 25 Horsepower.

For Catalog, Write to
**THE AMERICAN
PULLEY COMPANY**
4280 WISSAHICKON AVENUE
PHILADELPHIA, PENNA.

Defense Business Checklist

• **Foundry Priorities**—Donald M. Nelson, new Director of Priorities, has issued a limited blanket rating, assigning A-1-b and A-1-c priorities to the acquisition of six items necessary to the manufacture of foundry equipment and repair parts. The six items are castings and forgings; sheets, bars, shapes, plates, and tubing (ferrous, non-ferrous, and non-metallic); electrical equipment and accessories; mechanical equipment and accessories; cutting tools, including cemented carbides; and maintenance and shop supplies (restricted to items necessary for proper maintenance and operation of manufacturing equipment and facilities). The A-1-b rating is assigned to deliveries of these materials to makers of moulding and core machines; blast-cleaning equipment; dust arrestors; sand preparation and handling equipment; and briquetting equipment. Manufacturers producing melting furnaces, blowers, ladles, tumbling mills, shakeout equipment, and mould and core ovens, have been granted the A-1-c rating. The ratings may be extended as far as necessary to assure delivery of the required materials to the manufacturer; but only defense orders may be expedited.

• **Steel Warehouse Quotas**—Steel warehouses (page 42), which constitute the normal source of supply for small civilian orders of steel, have been given priorities for obtaining stocks for resale. A quota is to be established for each warehouse buying steel directly from a producer. When this is done, a preference voting of A-9 will be assigned to deliveries of steel within the limits of the quota. All steel warehouses must file with the Priorities Division, on or before Sept. 15, a report (on form PD-83-a) listing deliveries from stocks owned and on consignment during the first quarter of 1941. On the basis of these reports, Priorities Director Nelson will determine what percentage of first-quarter sales should be set as the quota for delivery to the warehouse during the last quarter of 1941. Quotas thus established will remain in effect for each subsequent quarter until further notice. Until Oct. 5, the order permits deliveries of all types of steel to a warehouse under the A-9 rating to the extent of one-third of its receipts from mills of such types of steel during the first quarter of 1941.

• **Silk Labor Recommendations**—OPM's Silk Labor Committee has adopted six recommendations designed to alleviate the effects of priority unemployment on the silk industry's 175,000 employees. According to Bureau of Labor Statistics figures, temporary unemployment caused by stoppage of silk imports and the difficulty of obtaining substitute yarns has already hit 25,000 workers, 14% of the industry's total labor force. Committee recommendations are as follows:

(1) That the government allocate to former silk processors all synthetic

yarns set aside by priority orders, if a free and fair flow of rayon does not develop.

(2) That the 14% of rayon now held by the government be distributed immediately to former silk processors now in distress.

(3) That the OPM-sponsored conferences for the training, retraining, and placement of displaced textile workers be held immediately in Paterson, Wilkes-Barre, Scranton, Reading, Charlotte, and Burlington.

(4) That these conferences be part of a national program in placing workers displaced as a result of priorities and shortages.

(5) That Lessing Rosenwald, chief of OPM's Silk Commodity Section, call a meeting of the rayon industry committee at the earliest possible moment.

(6) That Mr. Rosenwald request every rayon producer to send a monthly report to his office on the distribution of rayon and acetate by weight and denier to each former silk processor.

• **Nickel-Scrap Changes**—Amendments to the nickel-bearing scrap materials price schedule, which went into effect on June 2 and covered a wide variety of scrap and secondary materials containing nickel, have been announced by OPA. Under the amended schedule, a manufacturer or fabricator who produces nickel-bearing scrap is prohibited from qualifying as a converter, and thus is not entitled to the converter's premium set forth in the schedule. Other amendments: one price—\$90 per gross ton—is fixed for the so-called 18% chrome-8% nickel type of stainless-steel scrap. Maximum prices for stainless-steel turnings and borings of both chrome-nickel and straight-chrome types, plus a maximum price for less-carload shipments of the former are also set.

• **P.S.**—The entire September production of pig iron, approximately 4,500,000 tons, has been allocated to steel mills, iron foundries, and other users. . . . The campaign to increase the scrapping of worn-out automobiles has been extended to Michigan, Wisconsin, and Minnesota. At meetings in Lansing, Milwaukee, and Minneapolis, government officials appealed to auto wreckers and scrap dealers to strip derelict cars now in their yards of saleable parts and scrap the bodies and engine blocks immediately. The campaign, already under way in Ohio, New England, Illinois, Missouri, Kansas, is designed to increase by at least 1,000,000 tons, and possibly several times that, the amount of scrap iron and steel produced in a year's time from derelict cars. . . . OPA has announced substantial changes in the Southern pine lumber price schedule, effective Sept. 5. The general effect of the revisions, which are incorporated in a detailed amendment, is to raise ceiling prices in order that thousands of small lumber mills throughout the Southern pine area will be able to continue profitable operation.

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AS
STILL WATER"



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Providing all the beauty of costly printing papers at the price of ordinary paper!

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Made super-smooth by new, exclusive coating processes. For high-quality printing.

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Companion to Trufect at lower cost. For use where quality remains a factor, but less exacting printed results demanded.

Multifect* Levelcoat Paper

Where economy counts in volume printing, this grade does a splendid job.

*TRADE MARK

By using *Levelcoat** papers you give printed pieces a real chance to do a selling job. *Levelcoat* is manufactured by new, exclusive coating processes which make the printing surfaces super-smooth—put snap and contrast into halftones...bring out vitality in colors...make type appear sharper and more defined. *Levelcoat* users praise the fine printing results obtained.

But more! *Levelcoat* papers provide all the beauty of costly printing papers at the price of ordinary paper. Advertisers who have been paying a premium price for superior printing results can now achieve important

savings, without sacrificing quality, by specifying *Levelcoat* papers.

Also, in cases where a small printing budget has limited you to not-so-good appearing catalogs, circulars and brochures, you now can step-up to *Levelcoat* quality paper at little, if any, extra cost.

Seeing is believing... Call your printer or paper merchant now for *Levelcoat* samples. Or write Kimberly-Clark for proofs of printed results. You'll agree, these new papers do most for the money! They are available through your paper merchant. If you prefer, inquire direct.

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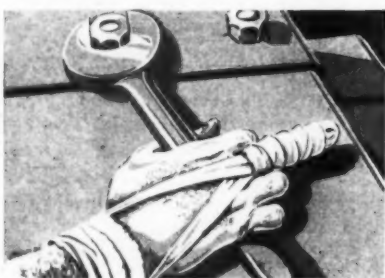
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Can we afford to let DERMATITIS slow down our Defense Program?

Workers' hands are industry's most important tools—tools that are today speeding up America's defense program. Help protect your workers' hands against skin infection and dermatitis with Formula SBS-11, the safe, industrial skin cleanser. Costs less than 1c a week per worker; removes grease and grime quickly and easily. Write today for generous free trial supply of Formula SBS-11 to Sugar Beet Products Co., 300 Walter Street, Saginaw, Michigan.

Formula SBS-II
THE WASHWORD OF INDUSTRY

which paperboard men say is optimistically rated at 9,000,000 tons can mean nothing but an acute shortage on the civilian side of the fence.

OPM is asking the folding-box manufacturers to save 25% of material right away. But realists in the industry say this is just inching up on the actual curtailment. The 1942 shortage of paperboard for civilian uses will come closer to 50%, if OPM is right about defense needs. Old hands in the paperboard industry are skeptical about the 6,000,000-ton defense item, suspect it may be a bogeyman to scare them into quick economies. One industry statistician used a half day and two scratch pads adding up every 1942 defense requirement he could imagine, and still achieved a total barely above 2,000,000 tons.

• **Different with Folding Boxes**—If defense really takes up 6,000,000 tons of paperboard next year, fabricators of fibreboard and corrugated containers and tubes can look forward to enough defense orders to keep their plants running night and day. But it's different with folding boxes, which have few military uses—though some makers are scrambling right now to win approval on folding-boxes designed to hold small-arms cartridges and the like.

No authoritative statistics exist on the uses of folding boxes. Recently, however, the Folding Paper Box Association of America undertook a sampling census among its members. Last week it came up with a set of estimates, admittedly tentative, but far from comforting in a period of defense priorities:

Food	40%
Soap	20%
Drug products	9%
Apparel	9%
Hardware	9%
Tobacco	6%
Miscellaneous	7%

• **What May Be Ahead**—The products absorbing the most folding paper boxes are cereals, soap flakes, and crackers. It is unlikely that these grocery uses will be prohibited, since not even the far-more-acute shortage of paperboard experienced by the British has yet brought this drastic step.

The immediate prospect is for conservation in the form of simplification and standardization of containers, and redesigning packages to use lighter weights of board and smaller areas of board. Tuck-in flaps, for instance, may be replaced with paste-down flaps. There is talk of substituting for tooth-paste cartons simple boxboard tubes into which the metal tubes will fit snugly for protection without end closures.

One classification of uses soon to get the axe is the non-functional paperboard gadget: Christmas sleeves on cigarette cartons, outer containers for holiday liquor, counter and window displays, and the like.

Cleaners' Problem

Synthetic fluid shortage, due to chlorine demand, may force widespread shutdown of plants, affect prices.

Unless a miracle happens within the next few weeks to boost production of chlorine, a widespread shutdown of dry-cleaning plants is inevitable and marked changes in price structures in many communities may result. Chlorine is one of the main components of synthetic cleaning fluids, used by some 5,000 cleaners. The shortage, however, will not affect some 7,500 operators who own plants which use naphtha or petroleum-derivative fluids.

For months, the 5,000 synthetic-solvent users have been struggling along on 50% to 80% of their solvent needs and reports last week indicated that several hundred shops have already closed their cleaning units, possibly for "the duration." Main reason for the shortage is national defense—one of chlorine's major uses, for example, is water purification in Army camps. Another reason is that the paper industry, deprived of normal supplies of bleached wood pulp from Norway, is grabbing every cylinder of liquid chlorine it can find.

• **Price Wars**—It was just about ten years ago that small pressing-shop operators could first buy inexpensive, self-contained, fire-proof synthetic-cleaning units. One result was a series of price wars that have waged intermittently or, in some localities, continuously since the first synthetic units were installed. No longer could wholesale cleaners "suggest" retail prices with a veiled "or else"—a not uncommon practice, according to the press-shop owners. Just how warmly the ex-customers of the wholesalers—who may now have to shut their plants because of the solvent shortage—will be welcomed back by the wholesalers is a matter of conjecture. Local price conditions may be a determining factor.

Some synthetic-fluid users, of course, will not turn to wholesale cleaners, but will purchase equipment designed for the still plentiful and cheaper petroleum-derivative fluids. One drawback to this change in equipment is the flammability of petroleum solvents; however, except in highly-congested areas, the use of high-flash petroleum solvents in approved machines is now permitted by most fire officials, without insurance penalties.

• **New Developments**—Latest development in the petroleum-solvent field is an all-metal, self-contained cleaning unit made by Triplex Corp., Chicago, which uses a solvent that is flammable but is practically unexplodable in normal uses.

ANACONDA WIRE & CABLE COMPANY

INTER-OFFICE CORRESPONDENCE

New York, September 1941

To: Advertising Department
From: Vice-President's Office
Subject: Advertising - 1941
Referring to: National Defense
File Reference: WES

In line with our recent conversation will you work up ads explaining to our customers the effect of national defense on our regular business. These ads must emphasize:

1. Our true appreciation of customers who have helped us build our business in the past.
2. Our trust in their appreciation that we must make the defense program our first job; explain all copper is now allocated by OPM and use of rubber is restricted.
3. Our regret that we cannot keep them supplied as we would like because of the defense program.
4. Our sincere effort to maintain customer good will so that we all may benefit when the emergency is over.

Remind everyone of this, too. No matter how long the emergency, our research laboratories will carry on in the same way as always. We'll be making product improvements, developing new and better products to the end that when it's all over, our customers and ourselves will reap the benefits of this work.

*AWS
This says
everything -
let's make
it ad #1 EFL*

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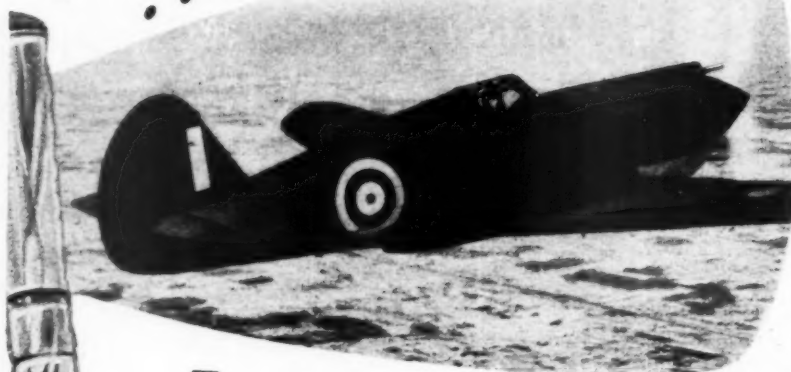
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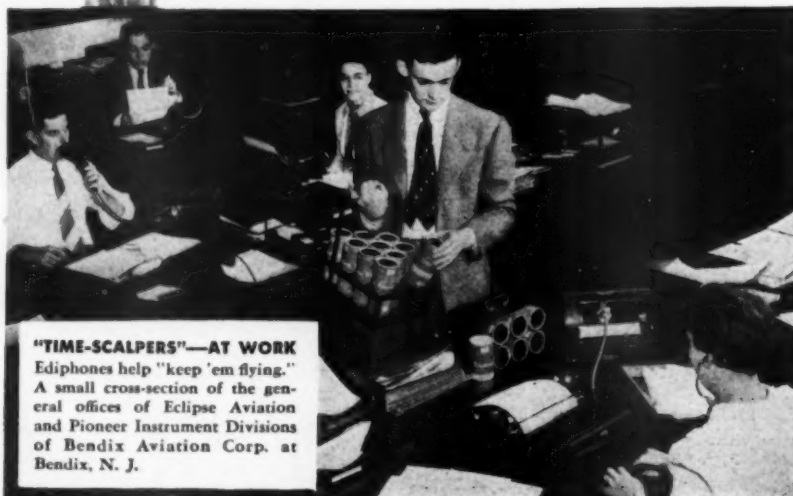
*Tomahawk
... on the war path!*



THE IROQUOIS tomahawk had *three* parts—the R.A.F.'s lethal fighter has over 10,000 . . . Many of the more vital parts for the Curtiss "Tomahawk" are coming out of Bendix, N. J. at an almost unbelievable rate—from Eclipse Aviation.

Eclipse has expanded *tenfold*—in twenty-four months. Its in-line production system is geared to streamlined office procedure. Specifications, correspondence, details and memoranda are *talked* away to Ediphones—minds are kept free for the *big* problem of speeding National Defense . . . Ediphone Voice Writing will "mesh" the time of secretaries and executives in a one-man business or an industry. For a demonstration—free—simply phone Ediphone (your city) or write Dept. B9, Thomas A. Edison, Inc., West Orange, N. J. or Thomas A. Edison of Canada, Ltd., 610 Bay St., Toronto.

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Ediphones help "keep 'em flying." A small cross-section of the general offices of Eclipse Aviation and Pioneer Instrument Divisions of Bendix Aviation Corp. at Bendix, N. J.

since its flash point is approximately 140 degrees Fahrenheit.

Under normal conditions, manufacturers of synthetic fluids might not welcome another new development called the Synth-O-Saver, an accessory which, through condensation, recovers up to 50% of hydrocarbon vapors. Except in higher-priced models which employ built-in condensers, these hydrocarbons are usually exhausted. Right now, one leading synthetic hydrocarbon manufacturer, viewing the forced trend toward petroleum-derivative systems, is recommending Synth-O-Saver as a practical method of getting by on pro-rated quantities of fluid.

Aetna Windup

Board asks for liquidation of savings and loan association, first big one to go since the insurance program started.

The savings and loan industry has been intently following a running account of the troubles of the Aetna Federal Savings & Loan Assn., of Topeka, Kans., since last June when a temporary conservator was placed in charge of the affairs of the 50-year-old institution by the Federal Savings & Loan Insurance Corp. Now it knows that the next chapter, coming some time next month, will probably be the last, and one without a happy ending. For if the recommendations of the board of trustees of the Insurance Corp. are carried out, Aetna will be the first large federally insured savings and loan association to be permanently closed since the Federal Home Loan Bank launched the Insurance Corp., eight years ago.

• **Points Cleared Up**—Supporting its decision, after two months of deliberation, the board released an explanation which clears up several points about which savings and loan executives have been wondering since they became federally insured.

One question is why Aetna, a \$6,000,000 association with 4,500 shareholders, has been singled out for liquidation when it is generally known that the Insurance Corp. has reorganized or otherwise financially aided an undisclosed number of other associations with balance sheets no better than Aetna's.

The answer to that, according to Chester Sterling, president, FHL Bank of Topeka (which serves a 4-state area), is that if Aetna's lending operations had been confined to Topeka, or even to the trade territory, the chances are that the Insurance Corp. would have found some alternative to liquidation. But Aetna, organized in the nineties, thrived on high-interest

real estate loans which it obtained through local agents scattered throughout Kansas and Oklahoma and for whom the 8% to 10% rates on small-town real estate permitted liberal commissions. Less than 10% of its loans were made in Topeka where, except for the Aetna case, only one building and loan failure has ever occurred (in 1927; investors finally realized 75¢ on every dollar).

• **Long-Distance Problems**—FHLB officials see their contention that the functions of savings and loan associations should be essentially local is borne out by Aetna's present dilemma. Aetna's management, convinced that real estate values would come back after the depression, refused to clean up its \$1,500,000 "property-owned" account (approximately 25% of net assets) at a sacrifice as most other neighboring associations had done. Small-town properties in Kansas and Oklahoma have yet to stage a strong enough come-back to ease the pressure on the association, and the expense of supervising these widely scattered properties has been a drain on its resources. At the same time, the cost of obtaining new business in today's highly competitive home-loan field is a real problem for purely local associations, which contend that the narrow margin of profit rarely allows enough for commissions.

While the proposed liquidation of Aetna has served as a veiled warning to the comparatively few long-distance lending associations, another phase of the case is of extreme interest to the entire industry. The morning following the announcement—in the evening papers of June 27—that a federal conservator (Insurance Corp. officials pronounce it con-ser-vay'-tor and Webster agrees with them) had been placed in charge of Aetna, pending an examination of its affairs, there was no queue of frantic investors clutching their share certificates at the front door, as might have happened in the "good old days." Instead, it was business as usual. A few long-distance phone calls and letters came from remote points where news stories had failed to carry complete details. Otherwise, it looked as though the investing public had been pretty well sold on the solidity of federally-insured shares by the constant plugging of the insured feature in all savings and loan advertising that has appeared anywhere during the past seven or eight years.

• **How Insurance Works**—Under a system not unlike FDIC insurance of bank accounts, all federalized savings and loan associations are required to insure investment accounts up to \$5,000 each. State associations which can qualify may also obtain the same insurance. Today 2,300 associations carry federal insurance for which they pay 1/4% of all accounts of insurable type plus obli-

THERE'S NO

PRIORITY

on Gray Matter



ALTHOUGH the capacity of H & D's 25 mills and factories is on an "all out" production schedule, the Hinde & Dauch Package Laboratory has a vast supply of "gray matter" available for your immediate use. The large backlog of practical experience built up by H & D Package Engineers is mobilized now to work out a solution for your packaging problems.



Practical designers and engineers comprise the personnel of the H & D Package Laboratory. Their services are available now to help you gain a "head-start" on tomorrow's merchandising race.

Hundreds of products—from glassware to gas-masks, from foods to fuses—are among the items being delivered under the protection of H & D engineered corrugated boxes. New packages—enabling old customers to place still further emphasis upon economy, enabling new customers to prepare for the future—are being designed daily in the Hinde & Dauch Package Laboratory. The services of the Package Laboratory are available now to any manufacturer.

Those using the present to prepare for the future, will find H & D Package Engineers ready to study both product and potential market—and design a package for a competitive "head-start" when marketing lights again turn green. Those concerned with today's packaging problems will find here a

source of competent recommendations for package simplification.

We welcome the opportunity to design your new packages, to help you with tomorrow's marketing problems. Your inquiry will receive immediate attention. You will be under no obligation.

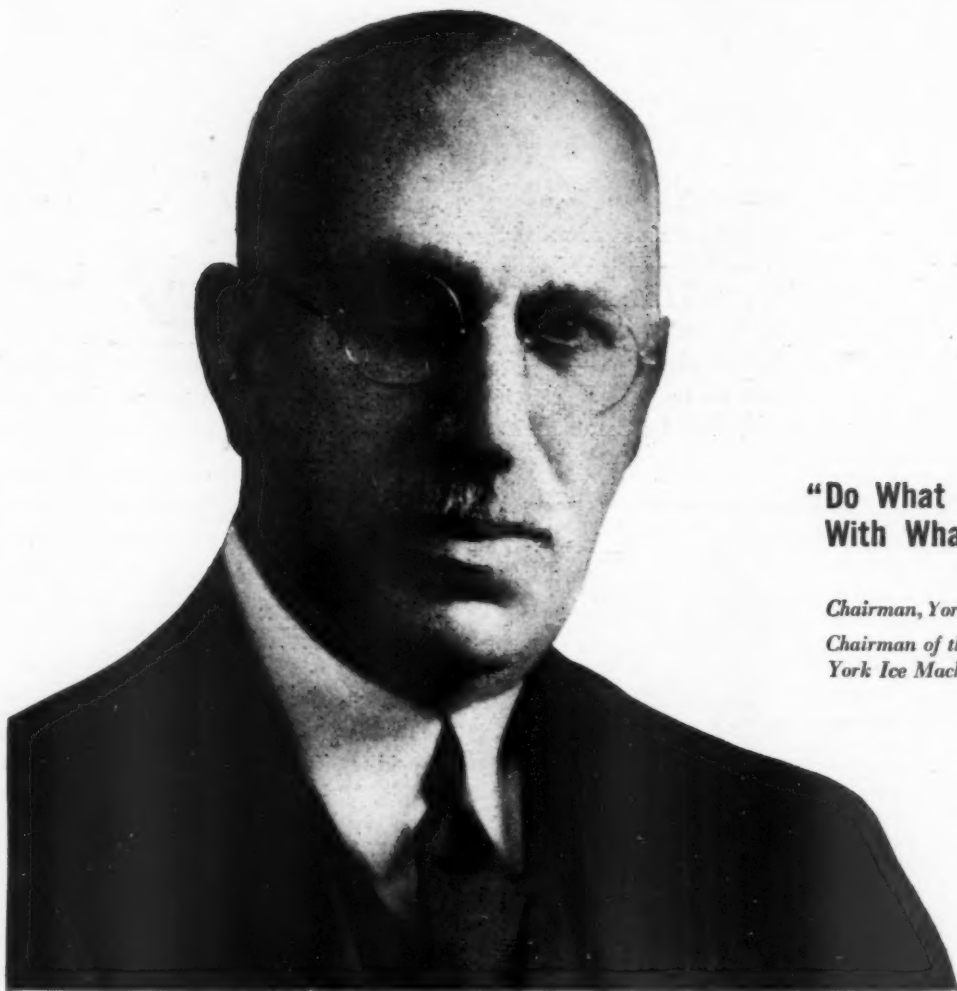
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FORMULA

For PULLING



**"Do What You Can
With What You Have"**

WILLIAM S. SHIPLEY,

*Chairman, York Defense Committee
Chairman of the Board,
York Ice Machinery Corporation.*

PHOTO BY RACHRACH

YORK MECHANICAL COOLING IS IN THE



THEIR EYES FOR THE U.S. ARMY!

York air conditioning speeds work at Frankford Arsenal optical shop by eliminating dust and preventing condensation within instruments after assembly.



stratosphere...at zero altitude!

York conditions Army aircraft engine test-rooms at Wright Field to 35,000 ft. altitude, requiring the largest refrigeration installations of their type ever known.



first line of defense

York provides every type of marine refrigeration for America's new 45,000 ton super battleships, cruisers, destroyers, aircraft carriers, subs, cargo vessels.



York air conditioning means closer tolerances, control of corrosion, concealment for Ford, Douglas, Studebaker and other huge, new blackout plants.

G *TOGETHER!*

THE "YORK PLAN" of industrial cooperation, epitomized in the now famous maxim, "Do What You Can With What You Have," provides the means of harnessing big business and little business so they can pull together!

America's defense job is too big for big business alone. Only through the teamwork of *all* business can the job be done.

Developed and put into operation by the manufacturers of York, Pa., the "York Plan" today is fast becoming the pattern for industrial communities throughout America.

In providing all manufacturers in a particular region with a complete inventory of the facilities every plant offers, in tools, men, experience, the Plan expedites defense contracts by subdividing them, gains speed and efficiency by allotting to each that part of the work he is best equipped to do.

Thus special priceless machine tools that operated a day a week, or even less, are now working full time.

The York Ice Machinery Corporation is proud of its participation in the "York Plan," and particularly proud of the leading role that has been played by its board chairman, William S. Shipley as Chairman of the Defense Committee of the Manufacturers Association of York.

This corporation is working 24 hours a day to meet the indispensable defense needs of air conditioning and refrigeration, yet because of the "York Plan" is able to take on additional work including the machining of gun mounts, powder presses, machine tool bases, diesel engine crankshafts. With every tick of the clock, this company lives up to the York dictum, "Do What You Can With What You Have." York Ice Machinery Corp., York, Pa.

YORK AIR CONDITIONING AND REFRIGERATION *"Headquarters for Mechanical Cooling Since 1885"*

SERVICE FOR THE DURATION



This Man's Army Eats!

York ice-making plants, York cold storage and York service refrigeration on bases and cantonments insure freshness and variety for Army "chow."



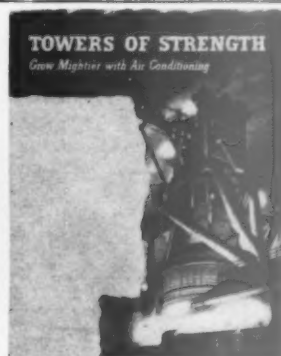
DRUM-TALK...streamlined!

York refrigeration helps weave the web of communication, nervous system of defense by controlled quick cooling of cable impregnation at Anaconda.



War Birds are nesting on this South Sea Atoll!

York refrigeration will serve the Navy at Wake Island, mid-Pacific outpost of hemisphere defense to assure Navy fliers and ground crews the comforts of home.



TOWERS OF STRENGTH
Gow Nightrier with Air Conditioning

York refrigeration helps produce more iron from existing blast furnaces by wringing as much as 35 tons of water a day from the air blown through the tuyeres.

gations to creditors, FHLB being the main creditor of most associations.

Although shareholders of Aetna will be given a hearing this week in Topeka at which the receiver will listen to any plans that may be submitted as a substitute for liquidation, at the same time the receiver is making plans for the transfers of shares to other insured associations in the vicinity of each shareholder. So that shareholders may obtain cash immediately if they so desire, the receiver will probably request waivers of the usual regulations pertaining to waiting periods. According to Insurance Corp. officials who have closed a few small insured associations, less than 10% of shares involved in such cases has been cashed at once. The receiver is also preparing to sell all Aetna properties but, to the regret of many savings and loans associations which had hoped to buy loans made by Aetna in their neighborhoods, these will be kept intact, temporarily, at least, with income being used to pay liquidation expenses.

NO DEFENSE TRAIN

Thomas Cook & Son has called off its "national defense exhibition train" (BW—Aug. 24, p. 30) which was to have started from Washington, D. C., on Sept. 8 for a tour of 39 cities. Reason given is that Cook found the difficulties of the project too great, but it also is understood that lack of enthusiasm on the part of business sponsors had something to do with the cancellation. Plans called for an 11-car train with exhibits by government departments. Costs were to be met by manufacturers (at \$1,800 each) whose names were to be carried by the train's literature.

MARKETING

Research Advance

Roper surveys for Columbia Broadcasting and Good Housekeeping mark trend toward qualitative analysis.

Marketing and media research—which during the past two decades have been evolving from a ragged hanger-on at the court into a full-fledged power behind the throne among advertisers and agencies—got a shiny new halo of authority at the time of the last presidential election. When two of the biggest research practitioners (Elmo Roper and Crossley, Inc.) forecast the results of a tight race with airtight accuracy, many a cynic suddenly changed his mind about an art he had been prone to call "playing hunches with mathematics."

This week some of the techniques which proved themselves in that election are being popularized to out-and-out commercial advantage. A preliminary readership study issued by Good Housekeeping magazine, and a circulation and sales effectiveness report from the Columbia Broadcasting System both emphasize several relative innovations in research methodology.

• **New Mileposts**—Elmo Roper conducted the field work for both studies. But that it was Roper, or Good Housekeeping, or CBS is less significant than the effect the studies will have on future

research thinking. Both jobs have four important characteristics in common:

1. Relatively small samples are used, but they are sorted with a fine-toothed comb as to age, sex, occupation, geography, population groups, education and income, thus eliminating most random errors. Previously, big samples were favored as insurance against error. Now the smaller sample is sure to come into vogue because it has several immense advantages—it's easier to select and handle; lends itself to personal interviews; eliminates the need for a big, sprawling field staff, sometimes staffed in part with poorly trained employees.

2. Better controls are applied to the interviewing. Noteworthy in this category is the extensive use of truth-tests (to gauge the human guinea pigs' proclivity for misinformation), confusion controls (to test accuracy of memory), and fatigue controls (to prevent the data from reflecting the weariness induced by protracted questioning).

3. Qualitative data gets considerable attention. This means more emphasis on detailed findings, less preoccupation with meaningless numbers.

4. Pre-testing of method is extraordinarily elaborate. In fact, the whole Good Housekeeping survey is a pre-test. Consisting of 8,000 personal interviews, it thus becomes one of the biggest trial balloons on record.

• **Some Big Figures**—Meantime—though it's less important—the two studies also contribute to the current trend of calculating media circulation in astronomical



WHAT, NO MOVIES?

If it isn't it ought to be the only building of its kind in the country—a service station in Millington, Tenn., which also houses a restaurant (left) and a bank (right). It all came about

when the \$26,000,000 Tennessee powder plant was built just a mile and a half from Millington. The town, which had a population of about 1,000 according to the last census, began to grow when the plant employed 3,300 people. So, when the

Mid-South Oil Co. began to build a new service station in Millington last spring, it took note of the growing needs of the town, and not only threw in a restaurant—the Wonder City Cafe—but also took in a branch office of the Union Planters Bank.

Concerning

THE AVAILABILITY AND QUALITY OF DODGE *Job-Rated* TRUCKS

THE FIRST obligation of Dodge today is to contribute to national defense. Our contribution, at present, is two-fold: In our extensive plants, Dodge is producing important national defense units, including thousands of Army trucks. Also, Dodge is building trucks for the transportation of vital commodities—the movement of which is the essence of *complete* national defense!

On the broad shoulders of America's great trucking industry lies the responsibility of moving largely increased quantities of materials . . . *efficiently, dependably, safely* and at *lowest cost*. The trucking industry's willingness and ability to do this job is beyond question. It becomes a matter of the availability and the quality of trucks. The need is for trucks that are *built* for the job . . . to *stay* on the job . . . *Job-Rated* trucks!

Today, we are building more trucks than ever before in our history: trucks for the Army; trucks for industrial

defense hauling! They're *good* trucks . . . the *best* we've ever built! Best design, best materials, best workmanship, best quality throughout.

Now, we also announce more powerful trucks . . . much more powerful than ever before. We're building these higher-powered trucks today . . . shipping them to our dealers. And, we'll continue to do our utmost to get trucks to you . . . quickly . . . as you need them.

Defense *needs* the trucking industry. The trucking industry *needs* trucks. Dodge is providing the best trucks that men, materials and machines can create, *Job-Rated* trucks of the same high standard of excellence that has won for Dodge its traditional reputation for Dependability.

H. J. O'Hair
President, Dodge Division,
Chrysler Corporation

*There can be no curtailment of Dodge Quality
... no substitute for DODGE DEPENDABILITY*





MORE OF THE SAME

Boeing's new four-motored Flying Fortress, the B-17E—probably the fastest, most heavily-armored bomber ever built—made a successful test flight at Seattle last week and was immediately ordered into mass production by the War Department, with awards of contracts totaling \$347,156,674 to the Boeing Aircraft Co. in Seattle, and to Douglas Aircraft in Long Beach, Calif. Boeing's B-17E and Consolidated's B-24 are

the two basic types for production in the new "big-bomber" program. Already in production at Boeing, the B-17E will be turned out by a production pool made up of Boeing, Douglas, and Vega. A new version of the B-17D Flying Fortress now in service with the U. S. Army Air Corps and the R.A.F., the B-17E boasts heavier fire power, has gun turrets at the top and bottom of the fuselage, and a tail turret to give protection from any direction. Its speed is about the same as the B-17D—300 m.p.h.

numbers—a trend initiated in 1938 by Life's continuing readership studies, latest of which boasts that Life's 3,000,000 ABC circulation actually spells 20,450,000 readers. Now the new Good Housekeeping survey shows 5.3 readers per copy averaged over 13 months (as against an ABC circulation of around 2,500,000). For its part, CBS claims that 91.1% of all U. S. adults heard one or more of its evening commercial programs in a single month.

• **Checking the Field**—Good Housekeeping's data was gathered in 10 cities. Women, personally interviewed, were asked to identify reading matter from Good Housekeeping, McCall's, Ladies' Home Journal, and Woman's Home Companion. All tell-tale tags and advertising were blocked out of the test material. Some confusion control was also tested by using pre-publication pages from Good Housekeeping along with actually published pages.

Furthermore, seven different issues of each magazine were employed to gauge the effects of time and memory.

Defining readers as women who recognized at least six items per issue, Roper found a stability of relationship among the four magazines which leads him to conclude that the best interval for measuring total accumulated readers is three months after the date of issue. This period will be used in the final study, now due to get under way with a sample of 12,500.

• **Measuring Effectiveness**—CBS's study, anchored on a nationwide sample of 10,000 personal interviews and covering all Columbia evening commercial programs for January, 1940, is designed to measure: (1) those customers for a product whose purchases are directly attributable to the influence of radio; and (2) the relationship between frequency of listening and product use ("whether the percent of buyers among three-and-four-times-a-month-listeners is higher than once-or-twice-a-monthers").

In attempting to measure these two factors, long considered the bugaboos of media research, Roper asked his adult guinea pigs two questions. In effect,

these were: "What brand of such-and-such a product do you use? Have you recently listened to program X, and how often per month?"

To tally results, he subtracted product-users among non-listeners from product-users among listeners. The difference was called the increment attributable to radio—all other things being equal by definition.

• **Listeners Buy More**—On the average, the number of product-users among listeners was 53% higher than among non-listeners. The lowest gain attributable to any program was 2%; the highest 271%. Says CBS: "All 40 programs created 37,000,000 more users and buyers for all the products which they advertised (many of these listeners being extra customers for many of the 40 sponsors)."

Frequency of listening had a marked effect on product use. Listeners who heard programs once or twice a month averaged 43% greater product use than non-listeners, while those who heard the programs three and four times per month averaged 57% greater use. Carefully fending off possible criticism of these luscious figures, CBS gratuitously tackled that old problem of whether a Ford owner listens to the Ford radio program because he owns a V-8 or because he likes the entertainment. CBS wrote the best answer to date:

"If it were true (that listeners listen only after they buy the product), program ratings would automatically be proportionate to sales, not to talent. You'd double your rating, not by hiring a new comedian, but by sampling your product to a few more million users."

• **Audience Sizes**—With respect to audience statistics, CBS reported that the "turnover" in listeners mounts up to such proportions that 26 out of 40 programs could boast monthly audiences of over 10,000,000 adults. The average was 28,973,000. Some samples:

Major Bowes	50,336,000
Hit Parade	46,027,000
Lux Radio Theater	44,743,000
We The People	38,509,000
Johnny Presents	31,816,000

Technically interesting in both the CBS and Good Housekeeping studies is the fact that Roper didn't ask all guinea pigs the same questions but split the queries into batches to avoid interview-fatigue. Since the samples were completely homogenous, the separate parts could later be fitted together like peas from the same pod.

TIRE PRICES

Two weeks ago, it was reported that Goodyear and Firestone were featuring in Labor Day sales 6.00 x 16 size tires at \$7.71 (plus tax) and trade-in of an old casing (BW—Aug. 30'41, p16). The \$7.71 was a typographical error; the correct figure was \$6.71.



Rough Riders of '41

YOU'VE got to be tough to take the rough-and-tumble jolting of a modern tank or scout car. Tanks no longer waddle slowly over obstructions, but leap and bounce over rough terrain at speeds up to twenty-five and thirty miles an hour. Scout cars, like the one in the picture, can leave the highway and roll right across country. Their crews—the "rough riders of '41"—must take the bumps. So must the machines themselves and the powerful engines that drive them.

American engineers not only produce the best automobiles, but today they are turning their skill and ingenuity to the problems of gasoline-powered defense equipment—tanks, armored cars, trucks, airplanes and motor torpedo boats. They are giving

America the best equipment, the best engines and the best fuels in the world.

We of Ethyl are privileged to help this vital work through both product and service. Ethyl's product, anti-knock fluid containing tetraethyl lead, is used by petroleum refiners to improve gasoline. Without high anti-knock fuels we might not have had many of today's most efficient types of engines—the compact gasoline power-plants that save weight and space where every pound and every inch count.

Because Ethyl's anti-knock fluids are an important factor in the development of both fuels and engines, our research laboratories in Detroit and San Bernardino cooperate with both automotive and

petroleum technologists. We function as a "clearing house" for technical information, help to coordinate many individual research efforts and contribute the results of many of our own tests and experiments with fuels and engines.

Thus, by supplying an essential product and by offering the services of our research laboratories to technical men and executives in every phase of automotive development, we are, we believe, serving the nation.



ETHYL GASOLINE CORPORATION

Chrysler Bldg., New York, N. Y.

Cincinnati TIME RECORDERS

For Every Time Requirement Since 1896

Now!
a TACKER
that
DRIVES TACKS!

WHEREVER tacking, stapling or fastening is done—in plant or shipping room—Model T-1 HANSCO One-Hand Tacker is not only faster but safer! Drives T-head Hansen Tacks in 4 lengths, 3/16" to 1/2".

Hold Tacker in one hand—material in other—tack fast as you grip. Compact. Easily portable. Self-contained. Flush front for close spaces. Submit your tacking problems. Ask for Folder.

A.L. HANSEN MFG. 5130 RAVENSWOOD AVE.
CO. CHICAGO, ILL.

DO YOU NEED A REAL SELLING JOB DONE?

Here is a salesman and contact man who can really get business. Due to government priority seeks new connection. Has broad seasoning, diversified experience, extensive acquaintance in the East, and intimate contacts with many well known concerns.

Commission or salary basis, but the possibilities must indicate better than ordinary remuneration to be of interest. No objection to travel. Matured Christian. Can furnish unquestionable proof of ability.

SA-309, Business Week
320 West 42nd St., New York City



**Put Boston
on and
I'll get
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on my
Dictograph**

"YOU SEE, when I'm using my outside phone I can still talk to anyone in this office, whose help I need, through my loud-speaking Dictograph. That saves us hundreds of dollars a year in Long-Distance tolls."

DICTOGRAPH

EXECUTIVE INTERIOR TELEPHONE SYSTEMS conserve management-hours and overhead dollars in 10,000 American offices and factories. It "Speeds up Speed" on both inside and outside conversations. Let us send you literature—or better still, demonstrate it in your office.

DICTOGRAPH SALES CORP.
580 Fifth Avenue Dept. 529
New York City



Boxtop Blues

Priorities make it tough for the premium makers, but those with anything to sell have plenty of business.

When makers and buyers of premiums gathered in New York City this week for the Seventh Annual Atlantic Coast Premium Buyers Exposition, they viewed the offerings of 69 exhibitors. At last year's show there were 98 exhibitors. In a nutshell, that's the story of what's going on these days in the 15¢-and-a-boxtop industry. Priorities and shortages have squeezed many makers out of the field entirely, others are in it only conditionally.

Aluminum cooking utensils and silverplate (made on a copper or zinc base) have been far-and-away the most popular premium items in times past. The Aluminum Goods Manufacturing Co. and Oneida, Ltd. (Community plate) took space at this week's show, but it was purely a goodwill gesture. There wasn't a sample in sight. Other regular exhibitors—Philco Distributors, Remington Arms, Revere Copper & Brass are examples—were notably absent.

• **Sideline Business**—Most premium manufacturers get into the business as a sideline. When they're afflicted with priorities and shortages, the premium trade is the first to go. Consequently, manufacturers of such diverse lines as radios, silverplate, towels, and plastics are now refusing premium orders.

This doesn't mean that manufacturers don't value their premium market. Witness the goodwill exhibits at the exposition and the "apology" ads appearing in the current issue of Premium Practice, trade magazine, on behalf of International silverware, Aluminum Goods utensils, and Zenith radios. Premium orders iron out seasonal slumps and slash overhead to the bone, frequently bringing down prices on a maker's regular line. The per-item profit is minuscule, but volume is terrific, and the manufacturer is absolved from all expenses of advertising and distribution.

• **If You've Got the Goods**—Manufacturers who were on deck at the show with something to sell were doing a roaring business. For example, the Robbins Co., manufacturer of costume jewelry and novelties, mostly for the "kid" trade, reports that its premium orders are at an all-time high. There's still glass, china, wood, enamelware, and leathersgoods (a big boom in the use of these), but probably not enough to go around. That's why the informed consensus is that in 1941 the total dollar volume of premium business will drop below the \$400,000,000 figure estimated for 1940.

Nobody will even hazard a guess as to the number of premiums offered over any given period of time. The Premium Advertising Association of America, Inc. (with a membership of some 250 of the largest premium manufacturers and users) estimates that 100,000 companies employ premiums in one form or another. There are "self-liquidators" (the money sent in by the consumer usually represents the full, delivered cost of the premiums), over-the-counter giveaways, reuse containers (dear to cheese makers), and coupon offers.

• **Use Catalogues**—When coupons are used in conjunction with catalogues—as they are by most of the food, soap, soft drink, and tobacco companies who are the biggest premium users—the customer is tied to the company with bands of steel. When the housewife has collected enough coupons for a glass coffee-maker, she can't resist moving on to a bridge table or a silver tea service. Since the big catalogues are almost in the mail-order house class (Colgate-Palmolive-Peet's current issue lists around 1,000 items), there's no end to the business.

News of a spectacularly successful premium runs through the trade like a grass fire. General Mills' model airplane giveaway in behalf of Wheaties (BW-Apr. 27 '40, p39) was one such record-buster. General Foods once gave away 41,000,000 aluminum jelly molds, on the basis of one jelly mold with every purchase of six packs of Jell-O, thus immunizing the housewife to competition while her family ate through the backlog of Jell-O.

• **Premium Plus Glamour**—When the premium packs an emotional wallop, anything can happen. Classic here is the offer engineered by Lever Bros. a couple of years ago on the "Big Sister" radio program for Rinso. After a careful build-up, Big Sister's fiancé presented her with a gold locket on their wedding day. Within the space of a few weeks, Lever's had disposed of over 1,000,000 lockets (complete with pictures of Big Sister and the fiancé) for 15¢ and a Rinso boxtop.

There are no limits to the ingenuity of premium users. When General Foods took over Log Cabin maple syrup, it was pushed via a dealer premium. To receive the premium, dealers were required to send in the jobbers' bills, paid and receipted within 30 days, as proof of purchase. Result: Jobbers' salesmen fell all over themselves loading dealers up with Log Cabin.

The trade is in considerable disagreement as to the type of premium likely to pull best now. One theory is that premiums should be strictly utilitarian—kitchen utensils, appliances, tableware, etc. Other is that, now that the family purse strings are looser, luxury items—jewelry, novelties, and decorative tidbits—are in for a boom.

Democracy Assigns a Vital Role to Pratt & Whitney air-cooled engines

To Pratt & Whitney aircraft engines has been assigned a great responsibility in the defense of democracy . . . the powering of *thousands and thousands* of American and British military airplanes.

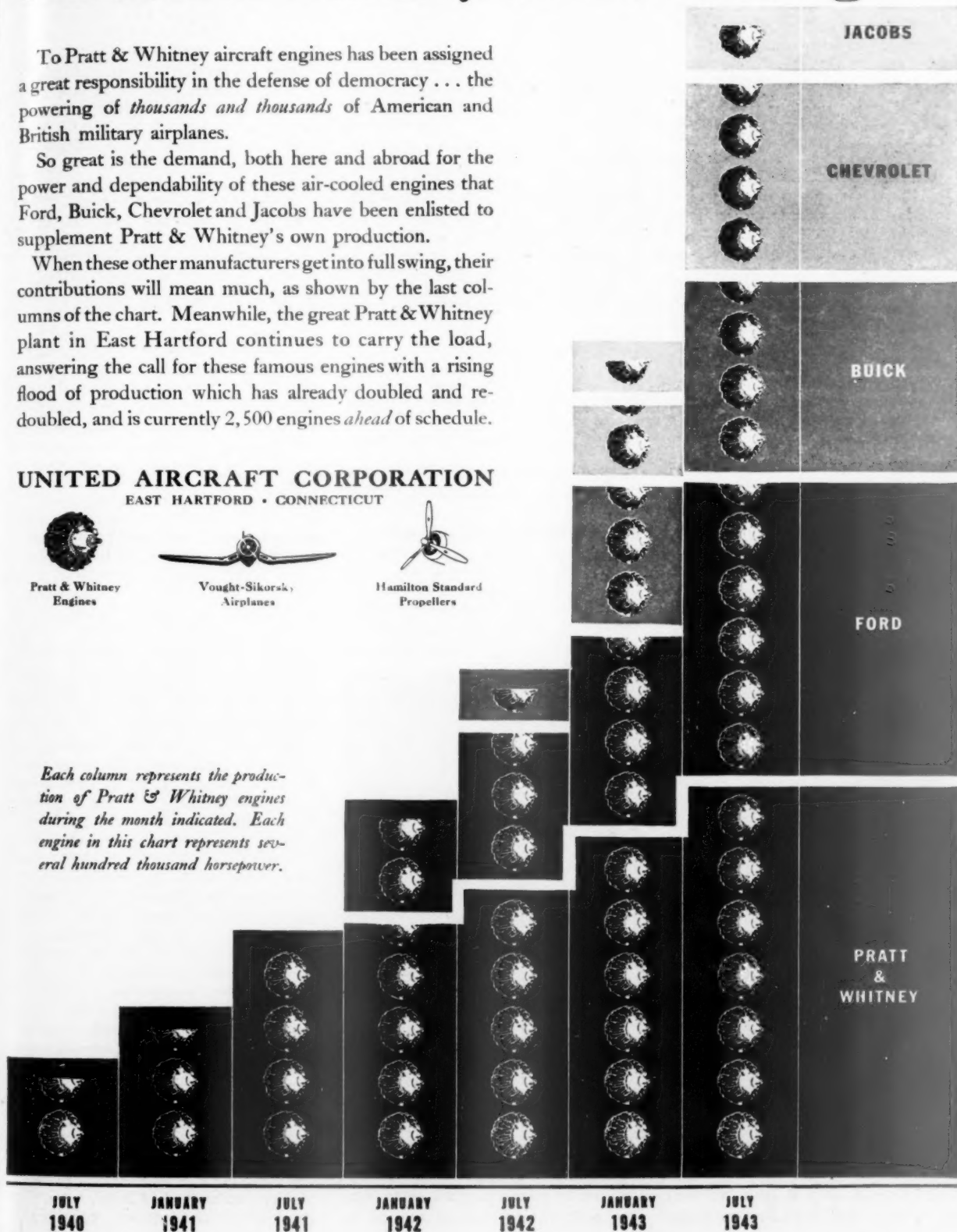
So great is the demand, both here and abroad for the power and dependability of these air-cooled engines that Ford, Buick, Chevrolet and Jacobs have been enlisted to supplement Pratt & Whitney's own production.

When these other manufacturers get into full swing, their contributions will mean much, as shown by the last columns of the chart. Meanwhile, the great Pratt & Whitney plant in East Hartford continues to carry the load, answering the call for these famous engines with a rising flood of production which has already doubled and redoubled, and is currently 2, 500 engines *ahead* of schedule.

UNITED AIRCRAFT CORPORATION EAST HARTFORD • CONNECTICUT



Each column represents the production of Pratt & Whitney engines during the month indicated. Each engine in this chart represents several hundred thousand horsepower.



Defense Casualty

Auction of stock ends life of Detroit steel warehouse, hit by priorities. Trade hears that other warehouses are affected.

Over 500 buyers from all parts of the country—export men, purchasing agents from big metal-working plants, and steel dealers—rushed to Detroit last week to snap up what in ordinary times would be an insignificant quantity of odd-lot steel—3,000 tons. More important than the quantity was the fact that it represented the remaining stock of one of the larger steel warehouses in the Motor City which had decided that priorities were going to put it out of business and that it was better to go out now with a cleanup auction.

• **Not Enough to Go On**—The warehouse operator, Consumers Steel Products, figured that, under the warehouse priorities setup (page 28), it would get only about 10% of its normal needs—insufficient to meet the running expenses of its 90 x 600-ft. plant employing 100 persons and usually carrying a stock of between 5,000 and 6,000 tons of sheets, plates, bars, angles, and galvanized material. Its situation was made special by the fact that its business has involved the jobbing of much "secondary merchandise"—off-gage material and mill over-runs, as well as prime steel. In normal times, there is plenty of secondary merchandise available, particularly when auto purchasing agents are in the saddle and can reject material

arbitrarily. But the dearth of steel has changed all that; big firms are willing to take what they can get and sources of secondary material have been practically dried up. All in all, unless a steel jobber has a close tie-in with certain mills on the basis of long-time purchases of prime material, he is pretty much out of luck in getting supplies direct. Furthermore, with the steel price structure knocked out of line, satisfactory service to old customers and maintenance of their good will becomes doubly hard. So Consumers plans to go out of business for the duration, though some firm members will set up as steel brokers.

• **Others Are Affected**—Steel jobbers who have handled only prime steel—that is, to gage and rigid specifications—say they will continue to get enough material to continue business, although at reduced levels. However, trade reports indicate that a number of warehouses in various cities have been closed and others are likely to be unless the situation is eased under present Washington efforts to solve steel tangles.

Reveal Formulas?

Court ruling may force drug makers to tell FDA and FTC what's in their products, though laws don't compel it.

Since enactment of the new Food, Drug, and Cosmetic Act and the Wheeler-Lea amendment to the Federal Trade Commission Act, drug and cosmetic lawyers and trade associations

have taken the position that manufacturers need not tell the government the precise amounts of ingredients of their products. But that cherished theory received a serious setback last week when Federal Judge Harrison of the Southern District of California ruled that a respondent must disclose his quantitative formula when asked to do so by an FTC lawyer during the course of hearings on a complaint against his product.

The drug industry was particularly sure that it did not have to reveal its quantitative formulas to the Food and Drug Administration or the Federal Trade Commission because Congress specifically rejected a proposal calling for the declaration of the amounts of ingredients on drug-product labels. Instead, Congress wrote into the FDA act a provision calling only for the declaration of active ingredients. Cosmetic labels do not have to declare anything in regard to ingredients.

• **Opposing View**—FDA officials, however, have contended that a broad general provision in their act, giving them the right to conduct complete inspections of drug and cosmetic manufacturing plants, includes the right to secure quantitative formulas. Manufacturers are protected by another provision calling for a stiff penalty on any government employee disclosing such confidential information. FDA men have taken this position in speeches before trade associations, but have never pressed the issue to the point of a court test.

In many instances, FDA has been able to secure quantitative formulas on a confidential basis from manufacturers who figured that it was better to cooperate with regulatory officials than to stand on legal technicalities. In cases where cooperation has not extended this far, FDA has been able to get all the information it needed by combining the keen factory inspection reports made by its alert inspectors with painstaking chemical analyses. In preliminary investigations FTC officials have asked for quantitative disclosure of ingredients, but have let the matter drop when manufacturers refused to reveal what they considered to be trade secrets.

If the decision is upheld, the entire picture of quantitative formula disclosures on drugs and cosmetics will probably be changed. Since it gives government attorneys the right to force a manufacturer to state the quantitative formula of his product in a public hearing or court case, it would obviously be to the advantage of the manufacturer to do so in confidential preliminary investigations and thus avoid having the formula made a matter of public record for the eyes of competitors.

• **Case behind the Decision**—This significant decision arose from a relatively obscure FTC complaint issued in 1938 against Frederick A. Clarke, who was conducting a comparatively small medi-



An auction of 3,000 tons of odd-lot steel, which would have a tough job drawing customers in ordinary times, turned up 500 buyers from all over the country last week. Consumers

Steel Products Corp. of Detroit, figuring that priorities would put it out of business sooner or later anyway, decided to go out this way—by clearing its remaining stock at auction.



SPECIAL INVESTIGATOR

Owen D. Young (left) has a trouble-shooting job for the government this week as he begins his investigation of the issues in the dispute between the United States Gypsum Co. and the United Mine Workers for William H. Davis (right), chairman of the National Defense Mediation Board. Using a special investigator in a labor dispute is not a new departure for NDMB, but it is the first time that anyone of such stature as General Electric's former board chairman has been pressed into service. And that

fact has led to speculation about whether NDMB is off on a new tack. Deluged with criticism for its rôle in the Federal Shipbuilding & Dry Dock strike, which led to the government's taking over at Kearny (BW—Aug. 30 '41, p15), the Mediation Board may well be exploring the special-investigator technique as a means of protecting itself against the charge of taking ill-considered action. Recommendations for the disposition of a labor dispute emanating from someone like Young would be less subject to attack as anti-business than if they came from the board alone.

cine business under the name of Bonquet Laboratories in Glendale, Calif. The complaint charged misleading representations in behalf of a vitamin-mineral-liver extract product advertised as a general tonic and blood-builder.

FTC hearings on the complaint dragged along until this summer when the commission's counsel subpoenaed the respondent to appear at a hearing in Los Angeles. After asking a number of preliminary questions which the witness answered FTC counsel asked Mr. Clarke to disclose his quantitative formula. He declined to do so on the advice of his own counsel. FTC immediately went to the federal court and asked Judge Harrison to make Mr. Clarke answer the question. After considering the case, Judge Harrison issued an order commanding Mr. Clarke to answer. Respondent again refused, whereupon he was jailed for contempt of court, but was released on bail pending the outcome of an appeal.

• **Line of Reasoning**—In his opinion, Judge Harrison said that he was inclined

to side with Mr. Clarke when the case was originally brought into his court, but after studying decisions rendered under old laws but bearing on the same general issue, he came to the conclusion that FTC was right. The judge took cognizance of the slowly-developing legal trend giving a tribunal trying a case of this kind the right to get all the facts necessary to form a proper conclusion.

Thus, the judge said, FTC was trying to find out whether representations for this product were misleading or not, and in doing so had to know what was in the product to tell if it could live up to claims made for it.

FTC lawyers draw a line between Judge Harrison's theory and the refusal of Congress to call for quantitative formula disclosures on all labels—in the later case, they say, Congress did not see fit to call for wholesale disclosure of all trade secrets, but in the former case the judge felt that disclosure was necessary when the manufacturer was charged with violation of a law FTC is presumably enforcing in the public interest.



"SHE SLIPPED ON A BANANA!"

THE luscious banana, occasionally maligned for its slipperiness, can now claim this quality as a virtue that aids our defense program. Ripe bananas, split down the middle, are used today to grease the skids for launching ships.

This novel engineering device adds a commercial use to the popular utility of bananas as a food. In 1940 the United States consumed 52,336,160 bunches—about 20 pounds per person—worth over \$29,000,000, much of it the dried, powdered fruit for ice cream flavoring, bakers' icings and fillings, baby formulas.

Hermetically sealed by discerning Nature, this nutritious tropical fruit is extensively imported by countries in the temperate zones. The AIU worldwide organization provides crop, warehouse and other forms of insurance for bananas, as well as simplified coverage in American companies for other properties and products abroad. Companies not now using this service are invited to confer with us through their own insurance brokers or agents.

We shall be glad to send you a booklet which briefly describes this service. Ask for Booklet "D"

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IT TOOK seven years for expert brains and skilled hands to construct the first Delta tilting arbor saw ... seven years of constant experimentation and testing to create a peak performing machine stripped of every excess pound. Then, tooled for production, it took Delta only *three months* to build the next 1,000.

Delta engineers abandoned small lot production—applied modern manufacturing techniques, and produced their stripped-for-action machine

tools in large quantities at lower cost.

Perfect design and ceaseless testing are the Delta formula for achieving supreme quality ... plus modern rapid production methods to trim costs.

In large industrial plants where quality is a *must*, as well as one-man shops, these fighting-trim Delta metal and woodworking machines keep winning new prestige by doing more efficiently the work of ponderous, old-style machinery *costing three or four times as much*.



Send for **FREE Booklet** "How to Increase Production" which tells you how the Delta idea can help you solve *your* problems. The Delta Manufacturing Company, 917 E. Vienna Avenue, Milwaukee, Wis.

DELTA MILWAUKEE

World's largest exclusive manufacturers of low-cost, high quality drill presses • grinders • abrasive finishing machines • cut-off machines • circular saws • band saws • scroll saws • lathes • jointers • shapers

Record Comeback

Phonograph disks, aided by prosperity and drastic cuts in price, are reaching for the sales highs of pre-radio days.

Get within earshot of any phonograph record dealer today and he's likely to buttonhole you with the joyous news that record sales are going to pass the 100,000,000 mark this year—that they are, in fact, going to be as good as they were in the early twenties, when the golden voice of Caruso poured from every home.

Manufacturers, likewise, are pinching themselves. They remember that in 1932 unit sales were less than 10,000,000. They remember when it was being whispered that mighty Victor was going to drop out of the business altogether.

• **It's Not All Roses**—The manufacturers' bliss is not entirely unadulterated. First of their worries is the metals situation, specifically copper and aluminum. Copper is used for the master, mother, and stamper dies from which records are stamped. Aluminum is used in making instantaneous recordings. Substitutes are being found for aluminum. Victor has a papercore disk, Columbia a glass-backed record (BW-Jun. 7'41,p51), but not for copper.

Manufacturers are hesitant about saying how they're fixed for metals. They don't want the idea to get around that they've been caught short, but, contrariwise, they aren't anxious to be tagged as hoarders. Consensus, however, is that the industry isn't in such bad shape.

• **Shellac Shortage**—Another serious potential shortage is shellac, the most important of the rosins which are the raw materials of finished disks. Shellac is imported from India and the price already has risen from 8¢ to 24¢ a pound. Manufacturers report that they are pretty well stocked, but any untoward development in the Far East would have them jittery.

Any shortage of raw materials for radio-phonographs and record players will, of course, have a secondary effect on disk sales. The record men figure, however, that since the government is giving priority to the repair of players now in use, their sales won't be likely to drop below present levels. Also, the radio industry, bent on making the most of what materials it has, is concentrating production on higher-priced models—which means, mostly, phonograph combinations.

• **The Estimates Vary**—The 100,000,000 sales estimate for 1941 stems from a recent survey by Radio-Television Journal and Talking Machine World, and

the industry is quoting it freely, coupling it with a 75,000,000 figure for 1940. Nobody knows how far off these trade estimates may be, for the three big companies—Columbia Recording Corp., Decca, and RCA-Victor—do not release figures. Less enthusiastic observers put 1940's unit sales at 60,000,000, anticipate 80,000,000 this year.

Whatever the total figures, however, there's no doubt that right now sales are reaching for the pre-radio highs. Columbia, for example, reports bigger sales figures for July than for December (ordinarily the peak month).

• **Price Rise Expected**—Increased record business, of course, stems mainly from increased prosperity, but it has been further stepped up by the drastic price cuts on classical records put through a year ago by Columbia and RCA (BW—Aug. 24 '40, p41). Now with a 10% manufacturer's excise tax in the offing, it looks as though prices may have to go up again.

Records are produced on a hair-edge profit per disk, and nobody thinks it would be possible to absorb any more costs. Talk among dealers is that manufacturers have not been too happy with the low-priced classics, though Columbia (which initiated the cuts) claims that its streamlined production makes profits possible, and Victor says that increased sales compensate for the smaller per record take. Columbia currently is bolstering its dealers for price rises with a stock anticipation order plan, which makes provision for staggered payments.

• **How They Rank**—Nobody today is really willing to stake his oath on how the three major companies now rank in sales volume, though most members of the trade believe it's RCA, Decca, Columbia. Decca men say they think they have a slight edge on Victor in unit sales. Columbia claims that its classical business is pushing Victor hard. There doesn't seem to be much doubt, however, that RCA is still No. 1 in dollar volume.

The famous, gaudy jukebox—often credited with being largely responsible for the revival of the home phonograph and record business—is not so important to the record men as it once was. Jukeboxes still take as many records as they ever did, but with sales for home phonographs kiting upwards, the proportion of the total going into the coin machines is smaller. Jukeboxes once were credited with taking between 35% and 50% of total record output. Best estimate today is that some 400,000 jukeboxes absorb between 18% to 23% of all disks.

The industry is not gloomy about the possibility of war turning people away from records. Along this line, Decca reports that British Decca's first quarter this year was the best in the company's history.

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A ROOKIE
BECOME A
SOLDIER?**



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Stoker Bonanza

St. Louis anti-smoke law booms sale of equipment permitting use of soft coal, but priorities may pinch.

Last year, when St. Louis' pioneer anti-smoke ordinance went into effect, soft-coal producers in the nearby fields of southern Illinois were badly hit for in effect it meant that they couldn't sell their high-volatile coal in St. Louis except to homes and factories equipped with stokers (BW—Aug. 31'40, p20).

Now, thanks to booming stoker sales in the St. Louis area, they are feeling a good deal better, but they, together with local stoker distributors, are watching with no little anxiety the effects of the federal curb on instalment selling, and the possibility that defense priorities may cause a shortage in materials required for the manufacture of stoker equipment. The St. Louis Stoker Association contemplates sending a committee to Washington to ask priority consideration for stokers for the city.

• **Smokeless Fuels Lose Out**—Only a little less concerned about the prospect for stoker sales in St. Louis are the smokeless-coal producers of Arkansas, Oklahoma, Virginia and West Virginia who have found a fertile market for their higher priced fuels this past year, thanks to the smoke ordinance. Last year, they shipped 950,000 tons into St. Louis. This year, the increased sales of stokers as well as gas and oil burners in the city will eliminate the need for approximately 25% of that tonnage.

This was indicated in a statement issued last week by Raymond R. Tucker upon his retirement as City Smoke Commissioner. Analyzing the city's probable fuel needs this winter, Tucker estimated that, if stoker sales equaled the 7,150 installations of last year, 227,000 tons of Illinois stoker coal could be substituted for a like amount of smokeless coal imported last year.

• **Two Estimates**—Tucker's estimate was based upon the national average consumption of 31.8 tons of coal per stoker, which includes high-tonnage industrial installations. The St. Louis Coal Exchange, concerned only with the retail distribution of coal, has estimated that domestic stokers installed up to Aug. 1 would require about 213,000 tons of fuel on the basis of an average of about ten tons to the stoker.

The Smoke Commissioner's office had issued permits for the installation of 4,184 stokers up to Sept. 1, compared with permits for 3,062 installations at the same time last year. However, for the month of August, stoker sales were off 213 from last year's August total. This drop may be explained by the

fact that domestic consumers, responding to the public appeal to buy their fuel early, had laid in 250,000 tons of smokeless fuel up to Aug. 1. Such purchasers are now taken out of the stoker market for the balance of the year.

• **\$2,000,000 Market**—The coal exchange estimates that 10,260 domestic stokers have been installed in the city since the enactment of the smoke ordinance about 20 months ago. On the basis of an average retail price of \$175.00, which stoker distributors consider a probably sound basis for calculation, the law has created a new market for this industry in which total sales are approaching the \$2,000,000 mark—with potential volume scarcely touched.

Many local coal dealers expanded their yards last year to handle stocks of the smokeless fuel. If stoker sales continue, they will have made the investment in vain because, as in the past, they will be able to get soft coal supplies from Illinois virtually overnight.

Re-enriching Flour

That vitaminized product, counted on to pep up sales, may require more vitamins, hearings on bread standard show.

Flour millers—two thousand of them, big and little, doing an annual business of about \$750,000,000—haven't been any too happy lately. Like many another industry, they miss foreign sales which, although small could be counted on for a tidy \$15,000,000 or so in the years just before the war closed those markets. Again, they are caught between rising raw-material prices—wheat prices have advanced 45% in the past six months—and official resistance to price advances on the finished product, bread, into which most of their output goes. Finally, they have had to contend with the long-term trend in popular taste which has run strongly in favor of fruit, vegetables and meat, against the "staff of life."

• **Looking for the Answers**—There's not much they can do about the first problem until the war ends; there's not even much prospect of their getting any lease-lend gravy, for Canadian millers will get the bulk of British flour business. Concerning the second problem, about all they can do is hope for relief, and Price Administrator Henderson's grudging willingness to countenance some slight advances in bread prices recently has given both bakers and millers considerable encouragement. Last week, millers in the Twin Cities reported sales considerably above 300,000 bbl. with one large eastern chain-store baker accounting for a reported 200,000 bbl.

• **Up for Revision**—As for the problem of meeting the competition of other

foods, millers were encouraged to believe they had that one practically licked when the campaign for vitaminized flour was officially launched on "V-Day" during the National Defense Nutrition Conference in Washington three months ago (BW—Jun. 7'41, p18). Now, however, they are not so sure. The idea of the enriched product has caught on all right, but the question of just what that product ought to be apparently hasn't been finally settled. Nutritional research has already cast doubt on the adequacy of the standard for enriched flour which the Food and Drug Administration officially promulgated on "V-Day."

For example, FDA's three-month-old standard provides that enriched flour shall contain at least one milligram of thiamin (B₁) per pound of flour. Now it appears that in toasting bread—and almost half of baker's bread is served toasted—up to 20% of the thiamin is destroyed, this in addition to losses incurred in baking. So nutritionists, headed by Dr. Russell Wilder of the National Research Council, want to increase the requirement by 10%.

• **General Tightening-Up**—Again, the original standard provides for 4 mg. of nicotinic acid. Nutritionists say that improved analytical methods reveal the presence of that much nicotinic acid already in the non-enriched product; so they want to boost the required minimum for the enriched product to 10 mg. Also, they want to make riboflavin (B₂) a required instead of an optional ingredient, despite the present difficulties of obtaining adequate supplies of synthetic riboflavin.

These proposals have emerged during the past few weeks in the course of the hearings which FDA conducted on standards for bread—white bread, plain and enriched, whole wheat, and a half dozen specialty types.

• **Separate Enrichment**—Originally, the FDA, in its standardization work, operated on the assumption that enriched bread would be made from enriched flour. Now, it appears that the bakers intend to use plain flour and do their own enriching with yeast and vitamin concentrates, and they urged FDA to make allowance for such practice in formulating standards. The millers don't particularly care whether the bakers use enriched flour or add the necessary enrichment ingredients themselves, as long as the vitaminized bread finds favor with the public and thus boosts total flour consumption.

In the bread hearings one novel proposal emerged: that the required amount of riboflavin be reduced from the level of 0.8 mg. per pound loaf, recommended by FDA, to 0.6 mg. Reason: If bakers are permitted to start with plain flour and add their own enrichment ingredients, they can use non-fat milk solids (dry skim milk) in place



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HOME-MADE POTTERY

A line of hand-painted china, made of an "all-Southern" body—feldspar, flint, kaolin mined at Spruce Pine, N. C. (left, above), and ball clay from



West Tennessee and Kentucky—has been produced by Southern Potteries, Inc., of Erwin, Tenn. This marks the first successful attempt of a commercial domestic producer to offer a pottery of this type, heretofore only avail-

able from foreign firms—at a reasonable price (probably about \$1.50 an item, retail). To be known as Blue Ridge China, it is now going on display at Southern Potteries' showrooms in New York, Chicago, Los Angeles.

of the scarce synthetic riboflavin, but 0.6 mg. of that vitamin per pound of bread is the maximum, practical amount which can be obtained from the skimmed milk solids. The proposal for a 0.6 mg. requirement naturally elicited the enthusiastic support of dairy interests. Not only these interests but producers of high potency yeasts and synthetic vitamins, as well as Dr. Wilder, supported the bakers' "separate enrichment" program.

• **Forcing Millers' Hand**—Millers realize that they will have to accept higher standards for enriched flour if FDA, as expected, sets standards for bakers' bread which will guarantee a greater amount of enrichment. This will be necessary if they expect to sell bakers any considerable amount of their enriched flour. Also they couldn't expect to sell housewives flour that would not yield bread as rich in vitamins as baker's bread. Already there have been discreet suggestions from FDA that the millers petition for a reconsideration of their standard, but the millers aren't likely to make any such move until the bread standards are officially promulgated, still a matter of several months hence.

NO FLIER FOR WARD'S

Announcement this week that Montgomery Ward & Co. will not issue a midwinter sales flier in 1942 is an indication of what shortages and rising prices are doing to the mail order business. Fliers customarily feature special purchases and price cuts on merchandise in the general catalogue. Ward's says it can't offer prices below the fall catalogue and maintain quality; hence, no flier.

Oleo, Farina Rows

FDA faces two more court battles over standards, thus making it four out of ten rulings up for review.

Federal Security Administrator McNutt's troubles as boss of the Food and Drug Administration were increased last week when he was served with papers requiring him to defend in court his recently-promulgated standards of identity for oleomargarine (BW—Aug. 2'41, p32) and enriched farina. The oleomargarine appeal culminates a vigorous fight by dairy cooperatives against an FDA ruling, effective last Saturday, governing the use of artificial flavoring, coloring, vitamin A, and sodium benzoate in margarine.

The dairy-butter group fight didn't get under way until shortly before Administrator McNutt promulgated the final margarine standard. The group took no part in formal public hearings on the standard, and its first objections were exceptions to a proposed standard published after the hearings had been concluded. These exceptions were filed by the powerful National Cooperative Milk Producers Federation.

• **Emergency Committee**—When the administrator persisted in promulgating the standard, as proposed, over the Federation's objections, representatives from 24 dairy states met in Chicago to form a special emergency committee to conduct the fight against the standard, which became fully effective on Sept. 6.

Two strong dairy-producer cooperatives of the Middle West, the Twin City Milk Producers Association of St. Paul and the Land O'Lakes Creameries of Minneapolis joined last week in asking the Eighth Circuit to invalidate the standard. Their major contention was that the use of flavoring, coloring, vitamins, and benzoates in margarine would not only hurt the dairy industry but would deceive consumers because it would permit the manufacture of a product closely imitating butter. They pointed out that the Food, Drug, and Cosmetic Law has a provision calling for a frank labeling statement when a product is an imitation of another.

• **FDA Viewpoint**—In turning down the petition to reopen the margarine hearings, McNutt pointed out that the FDA standard did not legalize a new imitation, but merely placed ingredient and labeling restrictions on the distribution of a product that has been legally marketed for over 50 years. It merely established a standard of identity for margarine and granted producers no new favors. Sale of the product would still be subject to the severe state regulation with which oleo has always had to contend (BW—Aug. 2'41, p32). Butter interests were far from satisfied.

FDA men say they do not want to get in the middle of the long and bitter fight between the butter and margarine industries. But as the case now stands, the margarine industry is in the position of being able to sit back and enjoy the prospect of seeing the government fight one round in its age-old battle with the butter industry.

• **Enriched Farina Case**—The petition for review of the enriched farina stand-

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E. A. BAILEY

Sept. 2, 1941

Treasurer



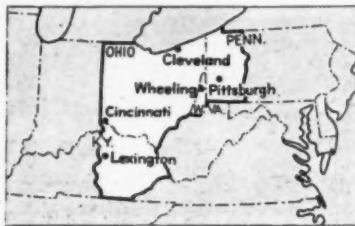
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The Regional Market Outlook

CLEVELAND (Income Index—138.2; Month Ago—135.9; Year Ago—111.1)—In the course of the next few months, production quotas of the Office of Production Management on consumer durable goods and growing material shortages in other non-defense lines are apt to put quite a crimp in payrolls and retail sales, especially in the western half of this Reserve district.

Moreover, local prospects are likely to be scrambled. A good many small, one-

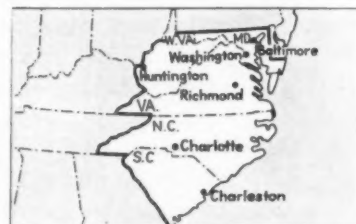


RICHMOND (Income Index—143.6; Month Ago—144.1; Year Ago—118.2)—Defense continues to lift income in the northern half of this Reserve district faster than the national average, especially at Baltimore, Washington, Hampton Roads, and the new camp and plant sites. In the Carolinas, however, the defense share has been limited to a few Army camps and arms plants—at Fayetteville, Wilmington, and Badin, N.C., and Charleston, Spartanburg, and Columbia, S.C. Even so, the business record so far this year has been bright. Construction contracts have been up about 200%, new automobile sales about 50%, and department store volume in Carolina cities 20%, as against comparable national gains of 50%, 35%, and 16%.

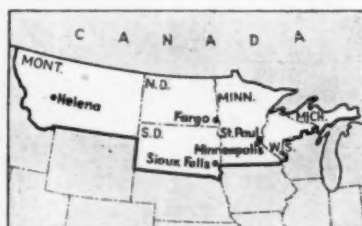
But now, the income rise there may be moderating. Cotton textile operations have stabilized in recent months, and further increases will be limited by machinery and labor bottlenecks. Simi-

lary, hosiery, rayon, paper and pulp, lumber, furniture, and cigarette output have been running at record highs, and little expansion is expected.

Higher prices will boost tobacco receipts 20% over last year, mostly in northern North Carolina, around Winston-Salem, Durham, Raleigh, and Rocky Mount. But, with a short crop cotton returns won't gain much even with higher prices. Carolina farm income may well be up less than the national average.



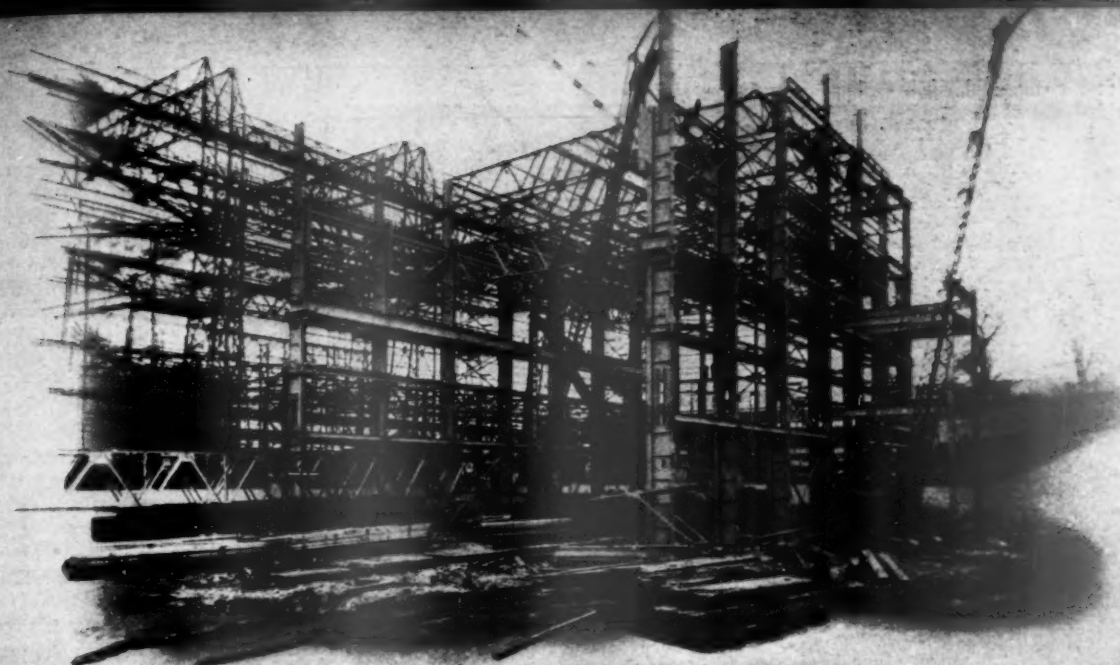
TWIN CITIES (Income Index—131.7; Month Ago—129.4; Year Ago—112.8)—Soaring farm income will assure favorable rural sales in Montana and the Dakotas over the next few months. North Dakota is the big wheat state, and with the crop larger and the price higher, 1941 agricultural receipts may advance fully 35% over 1940. South Dakota will fare well, too. Hog and wheat marketings will lift returns, and 35% more cattle are on feed than a year



ago. Montana's income—from wheat, wool, sheep, cattle—may be up 25%.

During the first half year, farm receipts in all parts of the district increased less, percentage-wise, than in the nation as a result of the drop in both AAA benefits (BW—Jun. 14 '41, p. 56) and wheat income from the high levels a year earlier. And in coming months, reduced marketings of potatoes, flax, wheat, and other crops in Minnesota and northern Wisconsin and Michigan may cut into income gains over a year ago. However, prices are rising, and, pointing to 1942, Autumn pig farrowings are expected to be up 34% in the district, as against only 13% for the country.

Industrial improvement continues. Plans for awarding defense subcontracts to Minnesota and Wisconsin manufacturers, for establishing steel plants in the Twin Cities, and for mining bauxite in South Dakota are studied. Copper and iron mining are steady at peak levels.



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ard was filed by Quaker Oats, which told the court that FDA's standard would have the practical effect of preventing it from marketing its farina enriched with vitamin D, a product that has been on the market since 1932. This petition strikes at the heart of the government's entire program of enriching flour and cereal products (page 50).

In line with this program, FDA promulgated standards for flour and farina which make the manufacturer put three members of the vitamin B complex as well as iron in his product if he is to sell it as an enriched or fortified food. Also, the manufacturer is given the option of including vitamin D or calcium.

Thus, by FDA standards of identity, a manufacturer cannot call his product "farina" unless it is made without the addition of any vitamins or minerals. And he cannot call his product "enriched farina" unless he adds all the prescribed vitamins and minerals in stated minimum quantities. In effect, therefore, since Quaker Oats adds only vitamin D, it can't use the word "farina" on the label at all.

● **Original Industry Reaction**—During flour and farina standard hearings, industry witnesses objected to the theory of standardization. However, most of the industry finally accepted the theory as part of the price it would have to pay for government and National Research Council promotion of the enrichment program. In view of this situation, the Quaker Oats petition came as a surprise, but it was partly explained by the fact that two officials of the University of Wisconsin Alumni Research Foundation, owner of one of the basic patents used in enriching food products with vitamin D, signed it.

Out of 10 sets of standards issued by the Food and Drug Administration since enactment of the FDA act, four have been taken to court, and a fifth was kept out of court only on the promise that the standard would be changed to conform to any decision made on a previous appeal. Pending in court are the standards for canned fruits and dried skim milk as well as the margarine and enriched farina cases. A decision has been rendered on an appeal against the sweetened condensed milk standard, but this is slated to reach the courts again.

U.S. "Vins Fins"

California vintners push production of quality wines to capture permanently market formerly supplied by importers.

Last year the United States consumed about 90,000,000 gallons of wine. California wineries supplied about 85%; other wineries supplied about 11%.

"Quality" imported wines—now largely cut off by the war—accounted for only 4%, or 3,600,000 gallons. Although, by comparison, gallonage in the quality-wine field is not impressive, prices are attractive and prestige value is great, so California producers are making a determined effort to capture a large part of the imported wine market—and capture it for keeps.

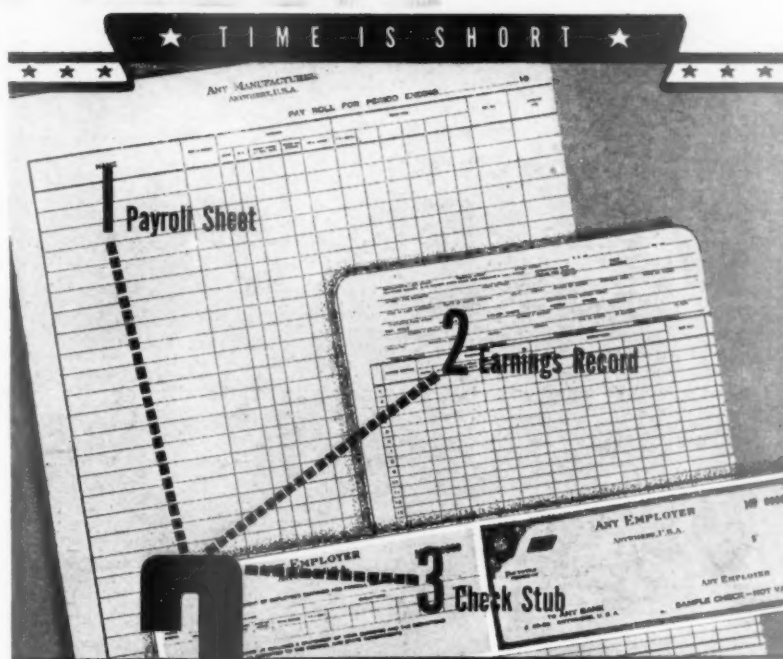
The score or so of California's 500 wineries that specialize in quality products figure that if they can get a foot in the door now they will have no trouble in holding their gains when the war ends, for they are convinced they can prove their claim that California can produce wines equal to any in the world. Notably, they are now selling them under names taken from their locations in the state or the California grapes from which they are pressed, instead of passing them off as copies of other European or imported types. One effort will be to set up clear definitions of the various types.

• **Expanding Production**—Quietly, such quality specialists as the Inglenook Vineyard and Beaulieu Vineyard in the Napa Valley, north of San Francisco; Wente Bros. in the Livermore Valley; Martin Ray, who operates a winery formerly owned by Paul Masson overlooking the Santa Clara Valley; the Martinis (R. and L.M.) near Santa Rosa; the Fountain Grove Winery; and the Salmina Winery—to mention only a few—are expanding production as rapidly as possible. Also, the large-volume wineries like Roma, Italian-Swiss Colony, Petri and Fruit Industries are enlarging their capacity for the quality items in their extensive lines.

This effort to increase the supply of "vins fins" will be supplemented by a program to teach bottlers and retailers how to take care of their stocks so that they reach the consumer without deterioration. Production and marketing of "vin ordinaire" have been so well organized by the industry, vintners feel, that they need only routine attention.

• **How It's Done**—Expansion of quality-wine production will be accomplished (1) by growing more of the grapes used to make "vins fins," (2) by placing larger quantities of wine in small oaken barrels for two or three years, rather than in large redwood vats for an indefinite period, (3) by increasing storage space in wineries so that more wine can be bottle-aged for two or three years after removal from the casks. Wine Institute spokesmen say that the amount of wine stored for aging has increased materially each year since repeal.

• **Research**—Important factor in improving quality has been research conducted by most wineries and notably research directed by Prof. Albert J. Winkler and Dr. Maynard A. Amerine at the University of California's School of Agriculture. Research at the univer-



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BW 9-13

sity is centering around discovering and providing the favorable conditions for nurturing European grape varieties and transforming them into "great wines."

FARMERS PLUG VITAMINS

California's large-scale marketers of farm products, headed by the big co-operatives, intend to plug the slogan "Get your vitamins from food" in their national advertising this winter. Copy will emphasize the claim that vitamins that are obtained from a "balanced diet" are more healthful than when taken in the form of drugs.

Golden State farmers feel this is the psychological time to capitalize in the tremendous popular interest in vitamins thus increasing California's agricultural income which this year will reach \$827,000,000, about \$175,000,000 more than last year. Income from all major crops as well as livestock and poultry products is running 30% ahead of 1940. Incidentally, California farmers by and large are not investing in more land as they usually do in boom years but are paying debts, buying new farm equipment and working themselves into a position to handle next year's crops with a minimum of hired labor.



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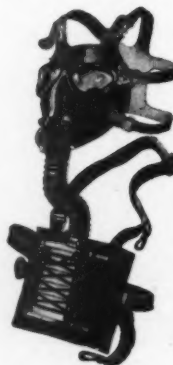
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Turn to the Left

Defeat of James Carey in fight for re-election as president of electrical union is victory for radical bloc.

Labor union leadership, like Mayor Hague in Jersey City, usually makes a habit of succeeding itself with unbroken regularity. A trade-union official, although he must stand for re-election every so often, has what is pretty close to a life-time job. At least that's the way it always has been in the labor movement, but that's another tradition which the upstart C.I.O. unions seem intent on breaking. That was evident last week when the United Electrical, Radio, and Machine Workers Union, C.I.O.'s fifth largest affiliate, refused to re-elect youthful but capable James Carey as president.

• **Left vs. Right**—Well known to industrial relations men in such companies as General Electric, Westinghouse, and R.C.A. with which his union has contracts, Carey was not unseated by any palace revolution. His defeat was due to his espousal of a 100% anti-Communist position which a majority of the delegates to the union's convention refused to support. The issue came to a head in the vote on Carey's proposal that locals be empowered to ban Communists from holding office. The fact that Carey also served on the National Defense Mediation Board, on OPM's Production Planning Board, and would occasionally address a group of business men under the aegis of some agency like the National Industrial Conference Board was used by his opponents in support of the further charge that he didn't give enough time to his presidential post.

Carey's removal is not expected to make an appreciable difference in the relations between U.E.R.M.W. and the industries in which it operates, for Carey and his opponents had no significant differences over policies on union contracts. His removal may, however, become a cause celebre in the left-wing vs. right-wing warfare which is now the dominant issue in the C.I.O. If it does serve to crystallize the issue of Communist influence and precipitate a showdown, its importance to business and to the country may be profound.

• **Shift in Position**—The anti-Carey group had not supported the defense program while Russia remained neutral. Once Russia became involved in the war, they went all out for America's preparedness program and American aid

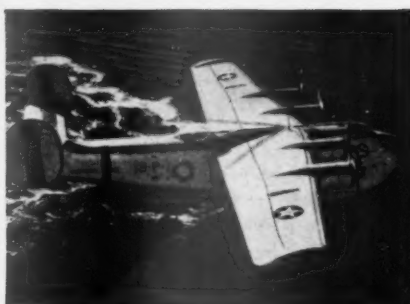


James Carey, 29-year-old president of the United Electrical, Radio, and Machine Workers Union and secretary of the C.I.O., lost the first and most important of his labor jobs last week when his union refused to re-elect him. Reason: his anti-Communism.

to "the victims of aggression." Carey, while welcoming the left wing's change of heart, maintained that it couldn't be relied on. He felt that if Russia's interests so dictated, his left-wing colleagues would change their minds again and attack the defense program as before. Therefore, he stood for a ban on Communists holding office in the U.E.R.M.W.

For their part, the left-wing forces that unseated Carey contend that their action was dictated only by a concern lest organized labor's freedom of action be swallowed up in defense "cooperation," typified by the Hillman policy of moderation and mediation, which Carey endorsed. They have espoused a program of no compromise and have been wary of all mediation efforts—government interference, they call it—which might freeze wages for the duration or involve surrender of the union's right to strike if necessary to enforce contract demands. In furtherance of this policy they not only gave the axe to Carey, but they enacted a resolution providing that a labor representative on a mediation panel should first consult the union involved before subscribing to any settlement proposal. In practice this is always done, but in making it a formal U.E.R.M.W. statement of policy, the anti-Carey bloc made crystal clear its attitude on labor's role in defense.

• **Notice to Lewis**—The question of support for Roosevelt's foreign policies used to be a touchstone which lined up right against left within the C.I.O. Sidney Hillman and the right-wing unions were a Roosevelt wing; John L. Lewis and the left-led organizations were anti-Roosevelt and isolationist. But Hitler's



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march into Russia threw the Communist groups into active opposition to Lewis and into outspoken attack on his isolationism. Thus, when C.I.O. holds its next convention—probably in November—Lewis could count on the backing only of his own Mine Workers Union in an attempt to regain the C.I.O. presidency, and the ex-mule driver is too shrewd a politician to make a run for it with such slender support.

This means that Philip Murray will have no opposition in keeping the C.I.O. leadership or naming his successor, particularly if he plays along with the "no compromise" left-wingers as he did last month in intervening to secure the reelection of U.A.W. secretary-treasurer George Addes (BW—Aug. 23'41p48) and last week is not intervening to try to save Carey's job. But the absence of controversy over the presidency most assuredly does not mean that the left and right are ready to make their peace. The right-wingers, all of whom share Carey's distrust of the pro-Communist groups, despite common aims of the moment, will not rest until Communists and Communist sympathizers are purged out of the labor movement. The left-wingers are equally dubious about the right wing's willingness to trust labor's case to the government.

• **Carey's Future**—Meanwhile, Carey, as the first important casualty of intra-union factionalism since the ousting of Homer Martin from the Auto Workers Union in 1939 over an entirely different issue, was pondering a course of action. This week, he was choosing between going back to work for Philco in Philadelphia, out of whose shops he came seven years ago to head U.E.R.M.W., or accepting the C.I.O.'s offer to make the C.I.O. secretaryship which he holds a full-time paying job. There were also indications that, if he showed interest, offers would be forthcoming from government agencies and from industry. Some older labor heads were advising that he go back to the work bench. They pointed out that if he started rebuilding his union fences that way, he had a good chance to make a future bid for his old job. Any other action would separate him from his base, without which his influence would depend on somebody else's favors.

AIRCRAFT PACT HURDLE

The problem of formulating a labor stabilization program for the aircraft industry and the difficulties it presents were pointed up last week by the results of a National Labor Relations Board poll at the Vought-Sikorsky plant at Stratford, Conn. The tally showed that 1,325 workers, many of whom were in a "plague o' both your houses" mood induced by competition between two unions, voted to be represented by no

union at all. The C.I.O. union on the ballot got 1,132 votes and the A.F.L. affiliate got 997.

Since pro-union sentiment was in a clear majority, intensified campaigning by the rival labor groups is indicated in the expectation that the board will order a run-off election between them. Such campaigning will serve to keep things unsettled until one organization's name-calling proves more effective than the other's. In the meantime, Washington officials who are trying to blanket the industry with a peace-preserving agreement are hamstrung by A.F.L.-C.I.O. rivalry and have little progress to report.

NLRB REVERSES ITSELF

Following its epochal decision in the New York & Porto Rico case (BW-Sep.6'41,p50), the National Labor Relations Board handed down another decision which personnel men interpreted as a slap at irresponsible labor and substantial support for management.

Reversing former decisions, the Labor Board's "conservative" majority held in the Ohio Calcium Co. case this week that the action of eight employees who refused to work unless two additional men were hired to lighten their task was insubordination and not a strike. Accordingly, the board ruled, their discharge was not discrimination against them for union activity—which had always been the board's position before—and they had no claim to reinstatement as strikers under the Wagner Act.

GREAT LAKES PACT

Every ship-building plant in the country is now covered by a labor stabilization agreement administered under OPM auspices. The last regional group was brought into the pact last week when yards on the Great Lakes, in conjunction with A.F.L. metal trades unions, ratified a zone agreement.

The Great Lakes contract is similar to the stabilization agreements already operative on the Atlantic, Pacific and Gulf Coasts (BW-Apr.19'41,p38). It provides a strike and lockout ban for the duration of the emergency, as well as wage and hour standards, working rules, training methods, and grievance-handling procedure.

Although the efficacy of the no-strike pledge in shipyard pacts is being seriously questioned in the light of strikes at Bethlehem Steel's San Francisco yards (BW-Jan.25'41,p46) and at Federal Shipbuilding in Kearny (BW-Aug.30'41,p15), government officials insisted on it because of its moral value. With naval construction work standards now stabilized as far as possible by agreement, Sidney Hillman's aides will be giving their major efforts to making comparable arrangements for aircraft manufacture (BW-Sep.6'41,p55).



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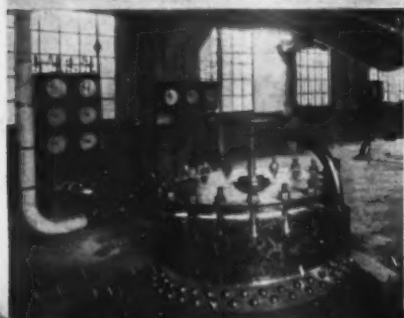


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MEASUREMENT AND CONTROL SYSTEMS

HOUSING

Houses on Hand

First of defense-area surveys shows Philadelphia will be able to house new workers; office space tight.

Behind the bustling defense building scene, a quiet survey to determine what housing for workers is available and what additional facilities will be needed has been under way for nearly three months in most major industrial centers.

Volunteer service groups, real estate boards, and a host of federal and municipal agencies have been directed in the search for shelter by the homes registration branch of the Division of Defense Housing Coordination.

• **Enough Homes**—In Philadelphia last week came the first report. City officials, worried ever since big defense boom got under way in the Philadelphia area (BW—Jan. 18 '41, p. 22), breathed sighs of relief. They heard that an estimated total of only 10,000 workers would invade the municipality by next June, that present and future housing facilities were adequate.

• **Questions and Answers**—The forecast was the result of answers to questionnaires sent to all manufacturers with defense contracts, to Navy shipyards, and to Army arsenals. Two questions were asked: How many people do you employ now? How many more will be required by June, 1942?

Back came reports that currently within the city limits 146,000 persons are busy on defense work and by next June some 30,000 more will be added, but of these new workers, 23,000 will be drawn from local non-defense plants and trade schools. Hence, only 7,000 new defense workers will require housing accommodations. To this total, however, must be added 3,000 non-defense workers who are expected to come to town to fill vacancies in civilian industries. Finally, allowance must be made for the 2,300 residents who will be seeking new homes in town, and for the 1,700 new residents who will represent the city's normal population growth. Hence, Philadelphia expects it will have to supply housing accommodations for a total of 14,000 workers and their families.

• **Surplus at Hand**—To meet this need, the local homes registration office, headed by William L. Nudge, United Gas Improvement official, reports the availability of 20,200 homes and apartments, not including 5,000 rooms.

His total is made up of the following: 8,000 currently vacant houses and apartments, about one-third in only

"fair" condition; 2,000 more apartments available through conversions; 500 more homes to be rehabilitated; 3,700 living units in federal housing projects, and 6,000 new homes now being built or planned. About half of these accommodations rent or have carrying charges under \$35 monthly.

• **Model Report**—Coordinator Palmer and Howard Strong, national registration work director, proclaimed the report a model for those covering 148 other areas which are yet to come—including one covering the entire Philadelphia industrial area—but warned real estate brokers and city officials that immediate rehabilitation was the first step in the order of things—or Uncle Sam would begin his own building. Palmer's office is now making technical advice on rehabilitation available to private interests at no cost (BW—Sep. 6'41, p. 32).

Although the housing situation is not as bad as it had been thought, Philadelphia knows that it is confronted with a serious shortage of industrial and office space in desirable sections. One by one, Army and Navy departments and other government agencies have been taking over office suites in the midtown section.

• **Moving Day**—A day before the report on workers' shelter was issued, 65 concerns began an immediate search for new quarters, all having been forced out of the block-long Guaranty Industrial Building. The new tenant at Guaranty, leasing 350,000 square feet for five years at \$84,000 annually, is Sears, Roebuck Co., which will install (at a further cost of \$75,000) its huge shipping department. Sears has been forced to vacate a 700,000 square-foot section of the former Atwater Kent radio plant, recently purchased by Uncle Sam for new U. S. Signal Corps quarters. Bendix Aviation, which has been using that part of the plant unoccupied by Sears (BW—Jan. 18 '41, p. 26), will continue to operate there.

Six Houses a Day

Standard plans, new methods and shop operations on the lot speed Pierce houses for Glenn L. Martin.

Demand for speedy construction of low-cost houses at defense plants is bringing into this field developments of the John B. Pierce Foundation (New York), set up to study and improve housing techniques by the late John B. Pierce, head of the company which was the forerunner of the American Radiator & Standard Sanitary Corp.

With an eye to improving design and cutting expense in the mass housing market, Pierce Foundation produced an experimental house at Lebanon, N. J., which attracted national attention (BW—Sep. 16'39, p. 22). This Lebanon house is the spiritual father of homes for airplane workers which are going up at the rate of six a day at the Glenn L. Martin Co. plant, Middle River, Md.

• **600 at \$2,000 Each**—The houses are being built under Pierce Foundation patents, and were developed by the Housing Research Division of the Foundation under the direction of Robert L. Davison. A Martin subsidiary—the Stansbury Corp.—is building the houses, will also own and manage them. Materials were ordered for 600 four-room-and-bath homes costing about \$2,000 each. Some 250 units have been completed; the other 350 are building.

The standardized plans, plus shop operations on the lot, enable a force of 200 men to prepare wooded land and maintain the six house completions daily. Wall panels, ceiling boards, structural members, etc., are delivered cut to specified sizes. Assembly work (nota-

bly on the 24-ft. trusses for the roof) is done in a field shop. Another field shop is used for assembly of plumbing which (like the electrical installation) is under separate contract. Thus work is done in factory or field shop, according to the economies.

The field shops are canvas "tents" supported by pipe frames, hence are moveable. When the first group of houses — "Stansbury Estates" — was finished, the tent-shops moved over to "Acro Acres." (The latter group is laid out roughly in the form of an airplane, has street names such as Fuselage Ave. and Aileron St.).

• **Weight Off Walls**—In architectural parlance, the Martin houses are "skeleton frame and curtain wall." As such, they meet the ancient complaint of engineers against the use of cumbersome and costly walls as weight carriers. And this revolutionary type of house makes use of materials already on the market. The walls are single-thicknesses of Cemesto, a Celotex Corp. product. This wall board—long in common use for partitions in industrial plants but new to housing—is made of a core of bagasse fiber (sugar cane) with a finish on both sides of asbestos cement. No painting is necessary, outside or in. The bagasse core of the board furnishes insulation, the asbestos finish provides protection from weather and fire. Edges of the board are sealed with a wax.

Panels of Cemesto are nailed to 4-by-4 in. uprights set 12 ft. apart and the joints are caulked and covered with battens of asbestos cement. The 24-ft. wooden trusses carry the full weight of the roof, leaving the interior of the house entirely free. For partitions which separate the rooms, a thin Cemesto board is used, since here insulation is not a factor. A prefinished Celotex board is used for the ceiling.

• **Special Roofing**—A feature of the New York World's Fair was the copper-covered roof of the Japanese building. The Coper-cel roofing used in the Martin Co. houses is a variation of this, another Celotex development. Roofing units consist of Celotex cores impregnated with asphalt and covered with mineral-surfaced asphalt roofing (instead of copper). They come in units 7 ft. long by 16 in. wide and interlock to form tight joints. This material (new to housing) combines in one piece the sheathing, insulation and roofing.

A reinforced concrete grade beam which rests on concrete piers, separates the wood members from the ground, and carries the floor joists and upright wall supports. There is a 2-ft. space under the floor which is sealed in winter to obtain the benefit of ground temperature. The excavation allows installation in the floor of a Coleman pot-type, oil-burning heater, which can be removed for servicing through the single register. The flue is porcelain-



About 250 Pierce houses have already been built for airplane workers at the Glenn Martin plant; 350 more are scheduled to go up. Cost per house: \$2,000.



One reason for the six-new-houses-a-day schedule at the Glenn Martin plant in Middle River, Md., is that

wood work and assembly are done in field shops—canvas tents that can be moved as building operations move.

enameled steel furnished by the Baltimore Enamel & Novelty Co.

• **How They're Equipped**—In addition to the heaters, the Martin houses are equipped with refrigerators, electric stoves, and Venetian blinds for the fixed, plate-glass "picture windows." There are two of these big windows in the living room of each house.

The Martin houses are built on a point that runs into Chesapeake Bay. Street lay-out follows the Radburn, N. J., idea of having the houses front on park-like courts, free of traffic.

SEWERPIPE BOMB SHELTER

With family bomb shelters increasingly an item of popular concern, Los Angeles County engineers, working with

the County Civilian Defense Committee, have designed a shelter which the citizen can construct himself, at moderate cost.

A 6-ft. length of 6-ft. diameter concrete sewerpipe is bought, costing about \$50. A trench is dug deep enough to hold it, and the dirt piled on the top. At one end, a wooden door is provided, protected by sandbags, and with an entrance, while at the other a wooden plug is built, and that end buried in loose sand. A door 2 ft. square, opening outward, is provided as an emergency exit; when needed, it pushes away the loose sand. Such a shelter is large enough for four or five persons, splinter-proof, and strong, because the round shape of the steel reinforced sewerpipe makes it almost impossible to crush.



Pierce Foundation houses have no heavy, expensive walls to serve as weight carriers. Instead, 24-ft. trusses

carry the roof, and walls are made of single-thickness Cemesto—long used for partitions in industrial plants.

PRODUCTION

Antifreeze Plans

While priorities confront all types with uncertainties, sales programs are being pushed ahead. Methanol tightest.

Wherever two or three motorists gather together along the North Atlantic seaboard, there's a whale of a lot more concern about their ability to get antifreeze for their cars this winter than about the prospects of getting gasoline. They accept the fact that distribution, not production, is the gas problem and look forward to the day when railroad tank cars will start rolling in their behalf. What they don't know—and neither do the antifreeze manufacturers—is what proportion of the antifreeze production will be released by the government for civilian automotive use.

• **Three under Priorities**—After all, there are only three types of modern antifreeze and they are all under priorities control. These are (1) ethanol, or ethyl alcohol or "grain" alcohol, made by the distillation of fermented molasses (Ajax, Five Star, Frost Chek, Super Pyro, Thermo-Royal), which entered the priorities critical list last week; (2) ethylene glycol, the "permanent" type, which is synthesized from either natural gas or cooking gases (Peak, a newcomer this year, Prestone, Zerex); (3) methanol, or methyl alcohol or "wood" alcohol, synthesized mainly from gases, but also available in a pinch as a by-product of wood distillation (Mobil Freezone, Nor' Way, Trek, Tri-Rad, Zerone). Glycerine, honey, kerosene, calcium chloride, etc., have long since dropped out of active use as freezing temperature depressants, but they may well be subject to the recall of weather-bound motorists before winter is over.

Up to now, the only worrisome shortage is in methanol, and there are two notable reasons for this, both military: (1) Methanol is the basic raw material for formaldehyde, large quantities of which are required for phenol-formaldehyde plastics of the high-impact Bakelite and Durez type, now also under priorities to insure a supply for parts used in artillery, shells, airplanes, tanks, bombs, what-have-you; (2) the high-pressure equipment used in synthesizing methanol is practically identical with that for ammonia synthesis, and a large portion of the productive capacity is being diverted to the latter, which is a step in making high explosives like amatol (TNT plus ammonium nitrate).

• **Not So Tight**—Ethylene glycol, under priorities control to insure an adequate

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supply for liquid-cooled Allison and Rolls-Royce airplane engines, army trucks, and jeeps, is not so tight as yet. And ethanol, whose production can always be built up rapidly, though painfully, by the diversion of liquor distilling capacity, seems to be on priorities mainly on a "what if" basis. If methanol becomes increasingly short, ethanol can be used instead in the manufacture of certain explosives. If we get into a shooting war and the demand for medicinals rises high, ethanol, an important ingredient and almost universal solvent, will have to take its place in any front line.

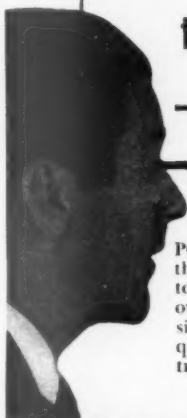
Right now the government is building seven big new ammonia plants which will release a large amount of methanol capacity upon completion. Du Pont, which will operate three of them on a contractual basis and which, incidentally, is building another new methanol plant for itself, is working on the premise that there will be plenty of methanol for all comers by the winter of 1942-43.

• **Advertising Plans**—Despite the uncertainties overhanging the civilian antifreeze situation, all six major producers—du Pont, National Carbon, Publicker, U. S. Industrial Alcohol, Standard Alcohol, and Commercial Solvents, accounting for 95% of last year's 50,000,000 gal. of total production—are going ahead with their sales and promotion plans. Like du Pont, which will lead off the season's campaigns with a color spread in the Sept. 27 Saturday Evening Post, all will, in one way or another, spread the slogan, "Help defense! Don't waste antifreeze!" On the theory that glycol will probably be more plentiful than methanol, Zerex will be played up. Zerone played down, by du Pont right through six successive Saturday Evening Post insertions and a schedule in American Magazine, Colliers, Life, and Time. Plans for the company's Five Star ethanol have not been released.

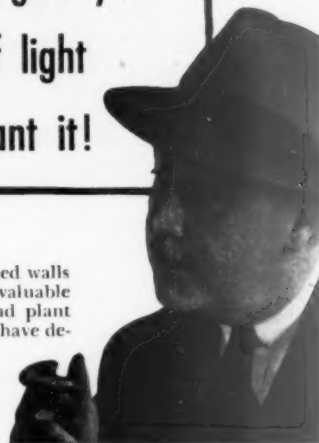
National Carbon will begin its national magazine campaign for Prestone and Trek in the October Country Gentleman, scheduled to hit the stands Sept. 28. Toward the middle of October this will be followed by campaigns in Colliers, Liberty, Life, Saturday Evening Post, and Time.

Carbon's advertising strategy will probably run directly counter to that of du Pont, in that it will not play down its Trek methanol which came on the market for the first time last fall. Competitors believe the reason to be not a super-production of methanol, but rather a forehanded policy of stocking distributors and dealers during the spring and summer, well in advance of the antifreeze season. Both Carbon and du Pont are in agreement on an informal forecast that glycol will constitute a bigger share of antifreeze sales than ever

PC Glass Blocks will give you
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PC Glass Blocks provide insulated walls that let in daylight. Especially valuable to many building operators and plant owners are the blocks which we have designed to answer problems of quantity and distribution of transmitted daylight.



DIFFUSED DAYLIGHT. Where workers face light-transmitting areas it is sometimes desirable to provide greater diffusion of light than can be obtained with ordinary windows or with standard-pattern glass blocks. PC LX-75 Glass Blocks are designed for this purpose. A Fiberglas screen inside the block completely diffuses transmitted light and decreases solar heat transmission.



COMBINED USE. By using Prism Light-Directing Blocks above eye-level and the matching LX-75 Blocks at and below eye-level, ideal light is obtained for workers both near and far from the panel. In addition to the Prism Light-Directing Block and three patterns of LX-75 Blocks, there are four attractive patterns of standard PC Glass Blocks. They assure your finding a type suited to your own requirements.



DIRECTED LIGHT. Frequently, men working near windows get a high intensity of daylight, while workmen farther from the outside wall get very little. PC Prism Light-Directing Blocks answer this problem. The prism-like interior faces of this block direct the transmitted light upwards toward the ceiling, where it is reflected downward to working areas far from the outside wall.

IN hundreds of buildings PC Glass Blocks have proved valuable not only because they improve daylighting, but also because their insulation aids temperature and humidity control. They eliminate dirt infiltration. They reduce maintenance costs, for they contain no sash to repair or replace. And they are easy to clean.

Whatever your problems of daylighting or insulation, put them up to us. We'll help you choose the right type of blocks for your building — help you decide where you can use them to best advantage. Write for a free copy of our big, illustrated book that tells where and how to use glass blocks. It shows how they have been used successfully in many plants today — and how they can help you.

"PITTSBURGH" stands for Quality Glass



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Please send me your free, illustrated book that tells how to use PC Glass Blocks:

☐ for factories; ☐ for commercial and public buildings; ☐ for homes.

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Plaza excellence is one of New York's abiding traditions—but, do you know that rates at the Plaza are moderate?

The **PLAZA**

Henry A. Ross
President and
Managing Director

FIFTH AVE. • FACING CENTRAL PARK • NEW YORK

LOEW'S INCORPORATED

"THEATRES EVERYWHERE"

September 5, 1941

THE Board of Directors on September 3rd, 1941 declared a dividend at the rate of 50c. per share on the outstanding Common Stock of this Company, payable on September 30th, 1941 to stockholders of record at the close of business on September 19th, 1941. Checks will be mailed.

DAVID BERNSTEIN
Vice President & Treasurer

PATENT ATTORNEY

Desires part time job establishing and operating patent department for corporation.

Graduate mechanical engineer; 14 years experience in handling all types of corporate patent problems; now with prominent New York firm.

BO-308, Business Week, 330 W. 42 St., N. Y. C.

before, possibly as much as one-third in gallonage.

• **Exception Noted**—To this forecast, the executives of Publicker take sharp issue. They point not only to the "what if" priority basis of ethanol, but to the fact that their company alone produces half of the 225,000,000 gal. of the ethyl spirit distilled annually for all purposes in this country, and is one of the few in a position to accept more antifreeze business than last year. It is no secret that they hope to shift certain old-time distribution alignments with a schedule in Colliers, Liberty, Life, and S.E.P., plus a radio program to begin in October. If war comes, "all bets are off," but they are planning regardless.

U. S. Industrial Alcohol is keeping its plans under wraps—"our usual strong national advertising campaign for Super Pyro will be completed, despite the lack of any real necessity for advertising this year." Its executives seem to be relying on a comparative plenitude of ethanol, like Publicker's. They feel they have an additional ace in the hole in their ethylene glycol, which has no trade name of its own, but is sold under various private brands "by several large marketers."

Standard Alcohol occupies a unique



B FOR VICTORY

David Sarnoff, president of the Radio Corp. of America, addressing RCA employees over a telephone hook-up last week, pledged that defense work would have the right of way in all five RCA manufacturing plants, and officially inaugurated RCA's "Beat the Promise" campaign—in which employees promise to exceed their pledges on defense production. At the Camden, N. J. plant, workers (taking time out of lunch hour for the ceremonies) held a demonstration; joined the singer Barry Wood in the campaign song, "Gonna Beat the Promise"; loyally decorated themselves with the symbol of the campaign, B—... (above); while factory whistles throughout the city sounded the code for B—one long and three short blasts. Topping off the proceedings was the "Star Spangled Banner", rendered by Lucy Monroe, RCA's Director of Patriotic and American Music.

EC&M CONTROL AIDS
Quality AND Quantity OF PRODUCTION
ON WORLD'S LARGEST PLATE MILL

ROLLING from ingots weighing up to 110,000 lbs., producing steel plates up to 196" wide—such is the "big mill" at Lukens Steel Company, Coatesville, Pa.

Since its construction, this mammoth plate mill has become world famous not only because of size but also because of quality of finished product.

In the maintenance of quality EC&M equipment plays a vital part. EC&M fast-operating Contactors permit quick and accurate setting of rolls for correct gauge of finished plate. EC&M Controllers also aid operation of charging machines and other drives in this plant.

It pays to specify EC&M Control for motor requirements.

THE ELECTRIC CONTROLLER & MFG. CO.
2684 E. 79th ST. CLEVELAND, OHIO

MOTOR CONTROLS • BRAKES • LIMIT STOPS • MAGNETS

position in that it has no brands of its own. Its production is divided between Tri-Rad antifreeze for Standard Oil of New Jersey and Mobil Freezone and Mobil Heavy Duty Antifreeze (in drum lots only, for trucks and buses) for Socony-Vacuum. Since these are of the methanol type, hence in the lap of the priority gods, Standard is following the policy of "government requirements first" and, meanwhile, building a new plant for ethanol which will not be in production during the present antifreeze season. Commercial Solvents will come through shortly with the No. 1 surprise of the antifreeze season by announcing Peak, the newest comer

to the ethylene glycol market. Its executives "have had a campaign all lined up," but much now will depend upon Washington. They, too, are in a unique position in that they blanket the field with antifreezes of both methanol (Nor' Way) and ethanol types (Ajax and Frost Chek), plus the new glycol. They don't expect to have to "push any of them too hard" this year.

Surprise No. 2 is the good news for motorists that five of the six major antifreeze producers are not raising prices, yet. Last year's \$1 per gal. continues to be the ruling price for both ethanol and methanol; \$2.65 per gal. the price for ethylene glycol. Sole price rise covers Thermo Royal (ethanol), which goes from \$1 to \$1.50 per gal., justified by Publicker on the ground that practically all its molasses is imported and has trebled in price since last January.

Consensus of the industry is that this winter's all-over gallonage will reach 45,000,000, or 10% less than last.

All-Purpose Car

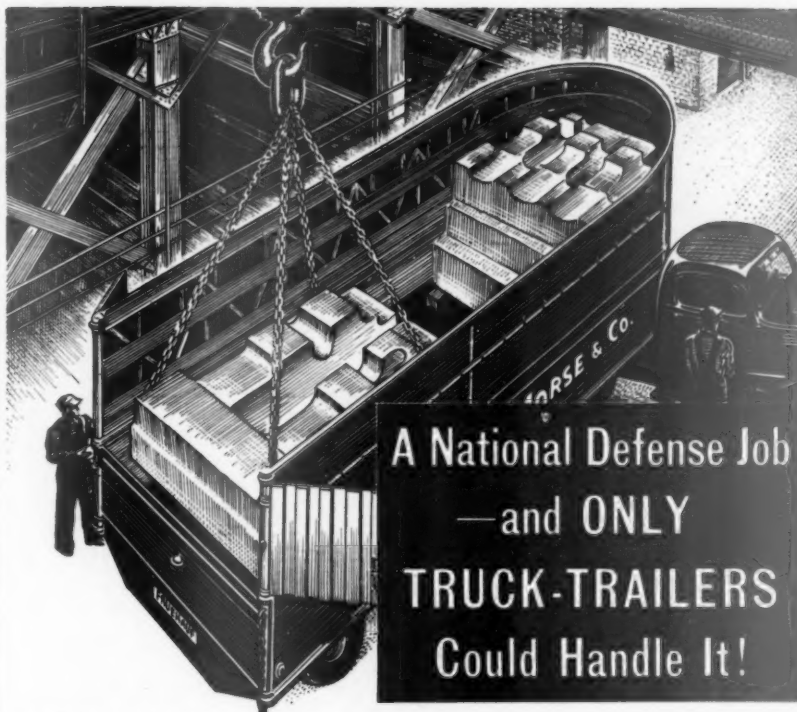
Pacific Fruit Express is building a refrigerator car to meet all demands. Bulkheads fold for full-length loads.

West Coast shippers of perishables see a major development in transportation of fresh produce to eastern markets in the new "all-purpose" refrigerator car to be announced soon by Pacific Fruit Express. The company will have 2,500 of the cars (rebuilt) in service by September, 1942, and all new cars constructed in the future will be of this type.

P.F.E. officials claim the car eliminates any need for duplication of equipment, provides considerable added shipping space and greatly simplifies transportation of perishables.

• **To Meet All Demands**—In recent years, produce shippers on the Coast have come to the conclusion that their perishables arrive at destination in better condition when each crate is iced. (For instance, they say that the ice keeps lettuce crisper than cold air from the car's ice bunkers.) So they have hounded P.F.E. to supply cars without bunkers, permitting more crates to be loaded. Other shippers have wanted still different types of cars. P.F.E. decided to design one car to meet requirements of all services now allowable under tariffs.

For many months P.F.E., which is under contract with Southern Pacific, Union Pacific and Western Pacific to furnish refrigerator cars for handling perishables originating on the three lines, has had in service cars equipped with collapsible bulkheads of various types but all had objectionable features,



FAIRBANKS - MORSE "Shuttles" Material Between Plants 240 Miles Apart...!

• **WHEN** the national emergency arose, Fairbanks, Morse & Co. turned promptly to important defense production . . . and encountered a special hauling problem . . . one which only Truck-Trailers could answer.

The Fairbanks-Morse foundry in Beloit, Wisconsin, makes castings for assembling at its plant in Three Rivers, Michigan—240 miles away. And the Three Rivers plant makes 5-ton frames that must be finished in Beloit. Material must move both ways . . . steadily and fast!

Three Trailers—One Truck

So, after studying all transport methods, Fairbanks-Morse adopted the "shuttle system." And for months, three Fruehauf 10-ton Trailers and one economical 3-ton truck have been operating on a 24-hour schedule . . . keeping materials flowing . . . and helping Fairbanks-Morse keep to its production schedule.

Here's how it works: 1. Truck arrives at Three Rivers, pulling a 10-ton Trailer load of castings. Trailer is left for unloading. 2. Truck leaves immediately for Beloit with second Trailer, already loaded with two 5-ton frames. 3. At Beloit, truck uncouples Trailer, starts back immediately

with already-loaded third Trailer. Truck and drivers are never idle . . . never wasting time and money!

Small Truck Pulls Big Load

It's not only the "shuttle system" that makes Truck-Trailers the answer to this hauling problem. Even more important, the user can pull such a big load with a relatively small truck . . . a truck that wouldn't carry more than half the same load.

Whatever your hauling operation, it's likely that Truck-Trailers will save you money. If you can use the "shuttle system," savings will be multiplied. A Fruehauf engineer will gladly give you the facts.

**World's Largest Builders of Truck-Trailers
FRUEHAUF TRAILER CO., DETROIT**

Sales and Service in Principal Cities
FACTORIES: DETROIT, KANSAS CITY, LOS ANGELES, TORONTO

★ ★ ★ ★
HAVE YOU realized how important highway transportation is in a successful national defense job? For example, one motor transport company in Nashville delivered nearly 4,000,000 pounds of material for the construction of Camp Forrest; now delivers more than 250,000 pounds monthly to the same camp; transports thousands of pounds daily between aluminum plants and airplane factories in the Nashville area, and handles many lesser assignments, too. • That's just one. Multiply its work by the thousands of operators in the United States, and you begin to get a picture of the tremendous national defense job being done by motor transport.

★ ★ ★ ★

FRUEHAUF TRAILERS

"Engineered Transportation"

MOTOR TRANSPORT IS ESSENTIAL TO NATIONAL DEFENSE



Big, 32-page booklet tells how permanent Maryland Metal Buildings



can be quickly erected AT LOWEST COST PER SQUARE FOOT OF FLOOR SPACE. Send for it today . . . or see page advertisement in Sweet's Catalog. MARYLAND METAL BUILDING CO., Baltimore, Md.

MARYLAND METAL BUILDINGS

Fast, Error-Proof COPYING



HUNTER
Electro-
COPYIST

Speeds Up Plant and Office Work

● Here's a way to get fast, exact copies of anything typed, drawn, printed or photographed. The Hunter Electro-Copyst—new-type photo copying machine—catches color-values, marginal notes and sketches, attached memos, stamps, etc. Shows every line—every tone in equivalent shades of black-on-white.

It's a godsend these days to Engineering Departments! Saves costly hours required for hand tracings—gets designs into the shop quickly. Makes sharp, permanent photocopy tracings on sensitized linen. Pays for itself in drafting room economies alone.

Anyone can operate this machine. Plugs into regular lighting circuit. Has no lens . . . requires no focusing. No dark room needed. With a flip of the switch—a moment's processing—you have the complete reproduction.

WRITE TODAY for complete information. Your Hunter distributor will gladly arrange a free demonstration at any time convenient to you—no obligation, of course.

There's an Electro-Copyst for every need. Portable models. Vacuum Seal Models (illustrated) in 3 standard sizes up to 30" by 42". Larger models custom-built.

HUNTER ELECTRO-COPYIST, INC.
107 East Fayette St. Syracuse, N. Y.

according to company officials. Worst of all, they weighed too much and adjustments were laborious and difficult.

● **Folding Bulkhead**—After considerable experimentation, P.F.E. designed a bulkhead which folds accordion-wise when not in use and permits: (1) standard-length loading with bulkheads in position for standard refrigeration and providing ice bunkers at each end of the car; (2) full-length loading with bulkheads in collapsed position locked against the end walls.

The latter adjustment provides an inside length of 39 ft. in a standard 40-ton car with floor racks level full length and no obstruction in ceiling and with smooth walls. P.F.E. officials claim the new car will "meet any service that can possibly be furnished in a standard refrigerator car."

Fortune in Mud?

U. S. Engineers think they can reclaim pulverized coal from accumulations of culm in Schuylkill River.

The U. S. Army Engineers believe they have a bonanza in coal delivered by Mother Nature right on the doorstep of industries in the Philadelphia area. Since 1890, when wet-jigging of coal was found to be more economical than dry hand picking, breaker operators have been allowing approximately 20%

of their mined product to wash away into the headwaters of the 150-mile-long Schuylkill River. In 1927 the culm waste had reached industrial Bridgeport and Norristown, and in 1933 a flood tumbled the black mass into the eight-mile channel of the lower river, fronting Philadelphia's chain of oil refineries.

Last week, the Army Engineers reported that they were dredging 1,200,000 cu. yd. of mud annually from the channel, have been throwing away 500,000 tons of coal every year, believe the time has come to do something about it.

● **Fortune Hunters**—Although coal operators insist that the cost of reclaiming the coal dust makes it economically unsound, the engineers point to a current demand for pulverized anthracite in industry and a threatened coal shortage because of curtailed transportation. They are speeding up a study of breaker discharge samples to determine coal content and size.

If a reclamation process is worked out, industries in the area will have a long-time supply, as the estimate of coal culm in the river's length has been set at 24,000,000 cubic yards.

● **An Old Issue**—Elimination of culm is an old issue. In 1937 the engineers warned that the river's charm would remain hidden, low farming areas continually would be flood-threatened, and drinking water costs of towns along the stream would steadily mount unless breaker waste discharges were controlled by removal of silt at individual breaker operations or by impounding the ooze in large reservoirs in tributary streams.



FERTILE FIELD

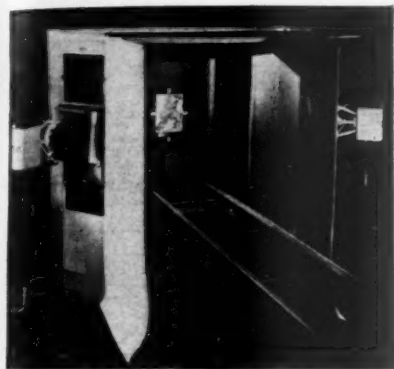
West Coast farmers are watching a new agricultural operation at Salinas, Calif., in which Associated Chemicals Co. takes over the entire fertilizing job for a large-scale lettuce or sugar-beet grower, preparing and applying the correct fertilizer needed for the

crop and soil conditions. After scientific analysis, ingredients like manure, nitrates, potash, phosphates, etc., are hauled to the farm by trucks to be ground and mixed in pre-determined proportions (above). The fertilizer is dumped in rows along the edge of the field, and picked up later by the spreading equipment, as needed.

NEW PRODUCTS

"Fluorescence Process"

Broadened applications for fluorescent pigments will be found in the new Kodak Fluorescence Process for securing complete color correction in photo-



mechanical reproductions of artists' illustrations (not photographs). The artist paints his picture with Kodak Fluorescent Water Colors instead of standard pigments. The picture is attached to a photographic copyboard and shielded from extraneous light by the Kodagraph Copyboard Hood (above). Adjustable inbuilt arc lights give the proper mixture of ultra violet rays and visible light to make the fluorescent colors glow. End results are highly precise color separations for four-color process printing plates and more faithful printed copies of the artist's original. Eastman Kodak Co., Rochester, N. Y., manufactures both water colors and hood.

Sparkless Flooring

In the few months since it was introduced, "conductive rubber" has found its way into industrial tires, furniture casters, and other items which might normally develop static electricity and thus endanger workers in explosive atmospheres. Most recent development is Conductive Rubber Flooring, announced by Goodyear Tire & Rubber Co., Akron, O., for locations like munitions plants where there must be both freedom from sparks and resistance to the chemical action of ether, alcohol, acid, and the explosives themselves.

Joint Repair

Loose chair rungs, table legs, and umbrella handles can all be repaired quickly with "Tite Joints," little cloth Maltese Crosses about 2 in. wide, impregnated with adhesive, and distributed by Tite Joint Sales Co., 309 Fifth Ave., New York. Directions: Dip one in water; place the center of the cross

CONCRETE

—a thrifty material with scores of uses important to you



TRACKS FOR SKYLINERS

Concrete airport runways carry big planes safely, cost less than other runways having equal load-carrying capacity.

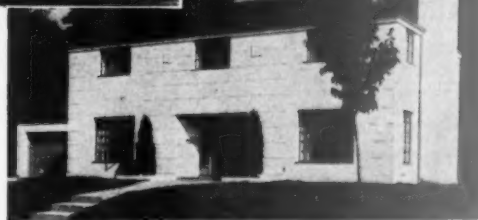
BUILDINGS FOR INDUSTRY

Hundreds of beautiful buildings erected today will cost owners less through the years, thanks to concrete's moderate first cost, low maintenance and long life.



HOUSES FOR ALL

Private homes, defense homes, all kinds of homes combine comfort and beauty with low annual cost when built of concrete.



BRIDGES, HIGHWAYS EVERYWHERE

Bridges and viaducts, roads and streets are providing greater motoring safety at lower cost per year, because of enduring concrete.

Back yard lily pools...skyscrapers...giant dams...few indeed are the works of the builder that do not serve better and at lower cost, thanks to the many qualities of concrete. Concrete is a plastic that can be molded into almost any shape or form. On hardening, it becomes strong and rigid...won't burn, rot or rust...resists weather, termites, floods, earthquakes. It accepts varied architectural treatment.

These qualities spell economy to concrete users. Concrete's first cost

is moderate. Long service with low maintenance results in low annual cost.

Ask your architect, engineer or builder about concrete. Helpful booklets on many subjects relating to the use of portland cement and concrete are available on request, mailed free in United States or Canada.

PORTLAND CEMENT ASSOCIATION

Dept. A9c-12, 33 W. Grand Ave., Chicago, Ill.
A national organization to improve and extend the uses of concrete...through scientific research and engineering field work

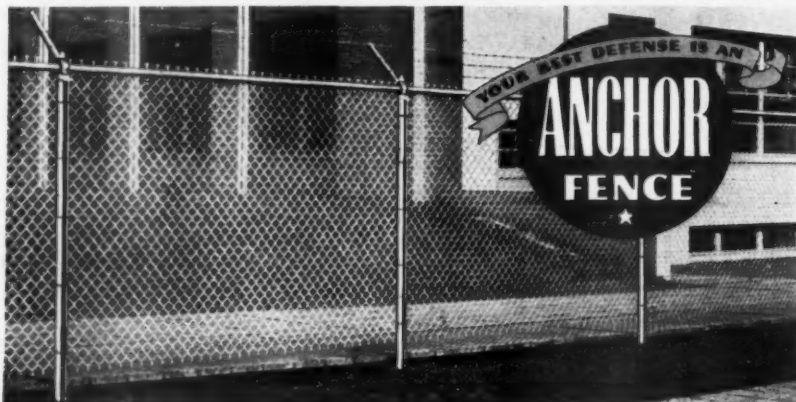


Are Saboteurs Watching Your Government Contract Work?

Almost certainly! For there's abundant proof that saboteurs are out to destroy or delay Defense Work whenever they can. There's only *one* effective way recommended to discourage such saboteurs—the complete protection of an Anchor Fence surrounding your plant property—and Anchor Fences around your power station, transformers, chemical storage, fuel supply and other vulnerable points *inside* your plant.

In this way you can protect your plant and personnel from *outside* saboteurs, and safeguard the vulnerable points from *inside* saboteurs who may be on your payroll NOW. Don't delay! Send for an Anchor Fence Engineer today. Let him show you how to provide complete protection with a minimum of expense for guards. Write or wire today to: ANCHOR POST FENCE CO., 6670 Eastern Avenue, Baltimore, Md.

NATION-WIDE SALES AND ERECTING SERVICE



FRIDEN AUTOMATIC CALCULATORS

Accurate Figures in a Hurry



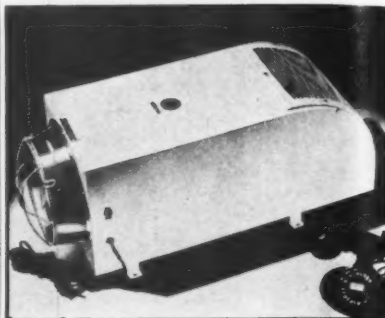
Friden Automatic Calculators are Sold and Serviced by a Factory trained personnel in over 250 Company controlled Sales Agencies throughout the United States and Canada.

FRIDEN
CALCULATING MACHINE CO. INC.
FACTORY AND HOME OFFICE — SAN LEANDRO, CALIF.

over the end of the rung; push the rung into place.

Portable Odor Adsorber

With the portable new Type A Odor Adsorber, developed by Dorex Division, W. B. Connor Engineering Corp., 114 E. 32 St., New York, a room can be freed completely of odors and gases at



the rate of 100 cu.ft. per min. A 40-watt fan circulates foul air through a dust filter and four renewable canisters of activated coconut shell carbon. The countless canals and capillaries in the carbon remove and hold the odors by adsorption, releasing freshened air.

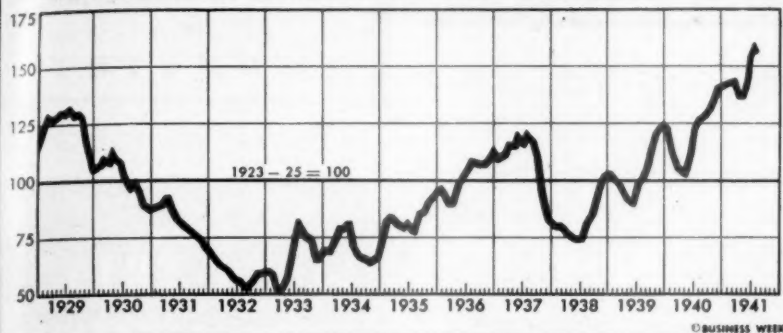
Hydraulic Vise

One pedal of the new Studebaker Hydraulic Vise moves a sliding jaw into contact with the work. A second



pedal applies pressure up to 10,000 lb. if necessary. A third pedal releases the work. Because the operator is free to use both hands, exceptionally small or large and heavy work can be considerably expedited. As developed by Studebaker Machine Co., 9 S. Clinton St., Chicago, the vise is a self-contained unit, requiring no outside source of power. It may be mounted horizontally on a work bench or vertically on a convenient wall or post.

MONTHLY INDEX OF BUSINESS ACTIVITY



Business Week's Monthly Index of Business Activity declined to 156.4 in August from its all-time high of 159.6 (revised) in July. The index for August, 1940, was 127.9. The

Annalist Monthly Business Index (adjusted for long-term growth) made another new high in July, rising to 131.3 from 128.9 in June. The Annalist index in July, 1940, stood at 105.9.

COMMODITIES

Sugar Stalemate

Cuban producers, riding high in first seller's market in 20 years, show hostility toward pegged price in U.S.

Confronted with the first seller's market since the last war, Cuban sugar growers are willing to wait until "mañana" to sell the sugar American buyers are bidding for. Last week, they rejected bids by American refiners for more than 600,000 tons of raw sugar. They said the maximum delivered price of \$3.50 a hundredweight in New York City, recently established by Price Administrator Leon Henderson, "wasn't enough." Finally, last week-end, growers did accept orders for 275,863 long tons. They'll pay any freight charges over 38¢ a hundredweight, but will receive the benefit of any change in tariff or U. S. price ceiling.

Under the threat of inflation and with the lingering memory of sugar rationing during the World War, consumers have been purchasing at such a fast rate that refiners fear melting operations may have to be suspended in another month if new raw supplies cannot be imported. But they can't bid more than 3½¢ a pound, which, after deducting the duty and freight, would leave just 2.2¢ for Cuban growers. And the American refiner no longer can negotiate or buy directly from the Cuban grower, as in the old days. Instead, he must struggle with government price limits and export-import regulations and deal with the National Sugar Institute of Cuba, a

trade association which controls the sale of most Cuban sugars.

● **Holdout for Prices**—This Institute believes that by retaining its holdings, it will force American buyers to pay more (BW—Sep. 6 '41, p. 8). First, it wants the price to be based in New York, so that any reduction in customs duty would accrue to the benefit of the Cubans. A 15¢ to 30¢ per cwt. reduction from the present 90¢ per cwt. duty is being con-



"...I'm one
Secretary he
didn't fire!"

OLD TOWN takes the CURL out of CARBON

THREE new girls in three months! When my turn came I said, "Firing me isn't going to give you cleaner carbon copies, Mr. Hooper—not if you keep on buying inferior carbon paper!"

Today we standardize on OLD TOWN'S New Curlproof DAWN Carbon and I'm the fair-haired lady of the office.

Do you dread cold weather because it makes your carbon curl? Switch to Curlproof DAWN and laugh at winter! DAWN stays flat even in bitter cold, produces brilliantly clear copies. Get a box of DAWN today. It costs no more than ordinary carbon. Write for free copy of our booklet "The Secret of Beautiful Letters".



OLD TOWN Ribbons & Carbons
"MAKE A GOOD IMPRESSION"

750 PACIFIC STREET, BROOKLYN, N. Y.

DUST DEFENSE starts at HOME!

DUST is a costly associate in business. It damages expensive machinery, soils products, increases operating costs, slows down production, lessens worker's efficiency. Yet dust is so easily controlled with Pangborn Steel Frame, Cloth Screen Collectors. A small investment now will end dust troubles for good. Talk it over with our nearest representative. Send for free booklet "Industrial Dust Control".

PANGBORN

WORLD'S LARGEST MANUFACTURER OF DUST COLLECTING AND BLAST CLEANING EQUIPMENT
PANGBORN CORPORATION . . . HAGERSTOWN, MARYLAND

sidered in a Cuban trade treaty hearing which began last Monday in Washington, D. C.

Second, the Institute wants the U. S. Maritime Commission to guarantee sufficient tonnage to move any sugar sold before Dec. 31 at a rate at least 5¢ lower than the present 40¢ per cwt. The commission has been trying to accomplish this by negotiation with steamship operators. Some in the trade say that it would be impossible today to get cargo space for more than 25,000 tons and that, if a ceiling is not set by the government, the shipping cost might almost double.

Third, Cuba has seen how the Office of Price Administration has elevated the ceilings on certain commodities; for example, the higher allowables on southern pine lumber announced late last week (page 28). Therefore, it believes that higher sugar prices might come soon. The price of world sugar recently has been making one new high after another (BW—Aug. 16 '41, p. 22).

• **Different Views**—Some of the bidding dealers and refiners were willing to allow Cuba the benefits of any reductions that might be made in either freight rates or import duty; others were reluctant to absorb uncertain freight costs while working under the price ceiling of 3½¢ a pound. Under the new Ships Warrants Act the Maritime Commission may deny warrants to unload cargoes in United States ports unless operators adopt whatever rates it deems reasonable.

Cuba reportedly had only a little over 100,000 tons of sugar available from this year's crop after a presidential decree releasing sufficient sugar to cover an increase in quota allotment granted to Cuba last week by the U. S. Department of Agriculture. President Batista increased to 275,863 tons the export quota to the U. S. and authorized the Cuban Sugar Institute to take from the 400,000-ton reserve quota financed by the Export-Import Bank sufficient sugar to fill this increased quota.

OUT FOR MORE BUSINESS

Long actively campaigning for broader trading, members of the Boston Stock Exchange this week took a step that most exchanges have flirted with but have been reluctant to take. A group of 16 houses advertised the merits of common stocks in the present market in which bond yields are at or near all-time lows, whereas the returns on good common stocks have been going up. It's a symptom of the tendency to break away from the tradition that investment advice can be given only when the customer asks for it. The financial community is anxious to know just how much can be done about selling stocks rather than sitting back and waiting for the customer to come in and buy.

FINANCE

Seeking Volume

N. Y. Curb plugs "dealer" trading as possible way to revitalize exchanges. SEC to consider operating plan.

The New York Curb Exchange is carrying the ball in a new plan that promises to revolutionize the technique of trading in listed securities. It might even revitalize exchanges as a medium for securities transactions and encourage listings. George P. Rea, president of the Curb, last week explained the plan to the Securities and Exchange Commission. SEC labeled it "meritorious" and appointed a staff committee to report back by Sept. 19 with recommendations for a "technical basis on which the plan might go forward with assurance that the interests of investors would be safeguarded."

For several years now the exchanges have witnessed a relentless trend toward lower trading volume. At the same time, trading off the exchange in listed stocks has increased. A survey recently prepared by Shields & Co., for instance, shows that 6,500,000 shares of stock were distributed in the secondary market by financial firms in the U. S. Most of these shares were listed on some stock

BANKERS
for
INDUSTRY

• IN CENTRAL NEW YORK STATE

IN CENTRAL NEW YORK STATE

It's the
FIRST TRUST
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Federal Deposit Insurance Corporation

exchange. In 1940, some 2,600,000 shares were similarly placed. Largest block was 1,518,639 shares of Libby, McNeill & Libby sold Jan. 21, 1941. These blocks were mostly English-held or owned by estates that needed cash for taxes. Off-board sales were made because the dumping of such huge lots on the exchanges during the existing dull markets would have driven prices down rapidly.

• **What the Plan Embodies**—These sales were made by dealers who received "discounts" or commissions for persuading their customers to buy the shares. The Curb wants such sales to be executed on the exchange. Its plan is:

(1) Regular execution of purchases



and sales of securities on the stock exchanges by brokers on orders from their customers would continue, as at present, at prices established by auction.

(2) In addition, a system of "dealer" bids and offerings would be established.

(3) Dealer bids would be "recorded on the tape and expressed in terms of 'price less a stated amount of discount'; e.g., 'CN 12½ less ¾'.

(4) Dealer sales would be recorded on the tape; e.g., "200 CN 12½ dealer".

(5) Only members of the exchange, or members of the National Association of Securities Dealers, through the usual medium of an exchange member and at regular commission rates, could purchase "dealer" stock. Such purchasers could not re-offer that stock on the exchange market during the existence of that particular dealer offering.

(6) "Regular way," or auction bids and offers, would take precedence over a special deal if the net price were the same as a dealer bid or offer.

• **Could "Push" Items**—Use of "dealer" offerings would allow dealer establishments (2,500 of whom are members of the N.A.S.D.) to spend time profitably "pushing" these listed stocks during trading hours for execution on the trading floor.

The plan is similar to a proposal placed before the New York Stock Exchange last April by Amys Ames, a partner in Kidder, Peabody & Co. (BW—Apr.19'41,p70). Ames' "net-price" method would be invoked only when the spread between the bid and offering price was wide and would permit an offering at a specified price "less specified commission."

Another plan that is now being considered by the Board of Governors of the Big Board is for negotiated markets in listed stocks on the floor of the exchange during trading hours. This plan would facilitate sale of blocks that are too small for secondary distribution but too large for the stock exchange to handle during the present dull days.

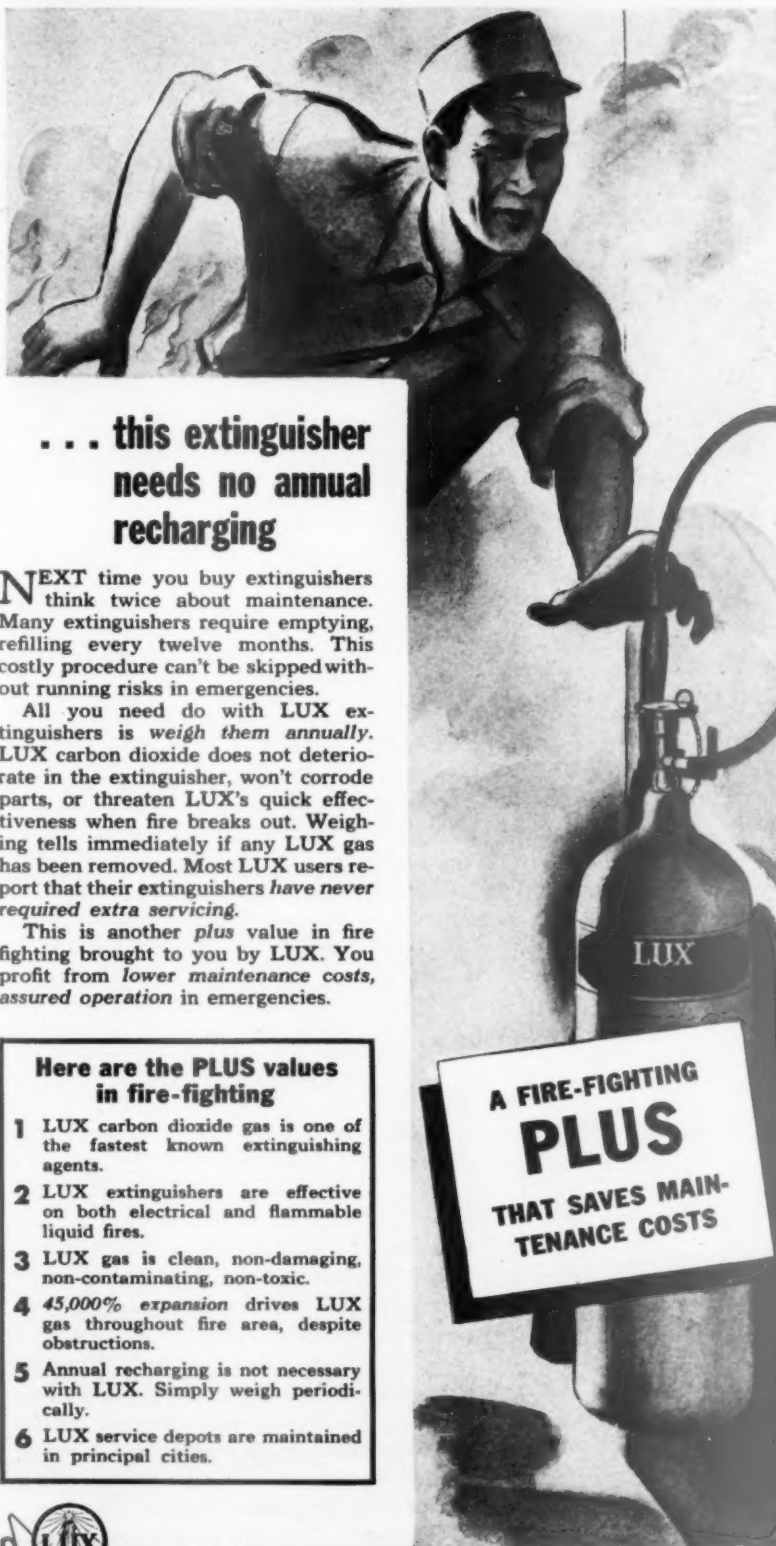
MORE COMPETITIVE BIDS

Investment bankers, since the Securities and Exchange Commission issued its Rule U-50 compelling competitive bidding for electric utilities' securities, have had only a very few experiences with the auction method. Borrowers, quite naturally, have been inclined to hold off until they could see how their colleagues fared under the new system.

However, there comes a time when such watchful waiting gets tiresome. That time now seems at hand, because there is an ever-increasing amount of conversation about utility financing that's "almost ready." One such issue, a \$35,000,000 refunding for Arkansas Power & Light Co., appears, in fact, to be on the calendar for early action.

Not subject to Rule U-50, but the

ALWAYS READY FOR ACTION!



... this extinguisher needs no annual recharging

NEXT time you buy extinguishers think twice about maintenance. Many extinguishers require emptying, refilling every twelve months. This costly procedure can't be skipped without running risks in emergencies.

All you need do with LUX extinguishers is weigh them annually. LUX carbon dioxide does not deteriorate in the extinguisher, won't corrode parts, or threaten LUX's quick effectiveness when fire breaks out. Weighing tells immediately if any LUX gas has been removed. Most LUX users report that their extinguishers have never required extra servicing.

This is another plus value in fire fighting brought to you by LUX. You profit from lower maintenance costs, assured operation in emergencies.

Here are the PLUS values in fire-fighting

- 1 LUX carbon dioxide gas is one of the fastest known extinguishing agents.
- 2 LUX extinguishers are effective on both electrical and flammable liquid fires.
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Incorporated

924 West Street, Bloomfield, N. J.



"Danged if I will—"

El Struthers, our skinflint contractor, woke up Chuck Biddle, the druggist, in the middle of the night in a snowstorm once last winter; and wanted Chuck to open the store and let him have twelve 3c stamps.

Chuck was mad as a hatter, said he'd be danged if he'd come down for a tightwad who never bought anything until he had to!

El was trying to get a bid for a hospital building to State capital before noon next day, wanted to make the 2:42 a.m. mail train. Instead, he had to hire a local taxi driver to take it on the train. The cabman got mixed up in the capital, left it in the wrong place, and El lost the job. Said he lost an \$8,000 profit, too.

El figured a Postage Meter came a lot cheaper! And El bought one so he'd never have to ask Chuck Biddle for stamps again!

YOU DON'T have to ask anybody for stamps when you have a Postage Meter. It holds as much postage as you want to buy from the postoffice, \$1 or \$10,000. It never runs out of the kind of stamps you want, because it *prints* any kind of stamp you need—plus postmark and slogan—directly on the envelope, and seals the flap simultaneously!

The Pitney-Bowes Postage Meter is the modern way of mailing. Saves time and effort; protects your postage, keeps its own records; uses little space, can be operated by anybody; is worth its cost in convenience alone. Ask our nearest office for a demonstration—soon!

Pitney-Bowes POSTAGE METER CO.

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Branches in principal cities. Consult phone directory... In Canada: Canadian Postage Meters & Machines Co., Ltd.

major item of interest at the moment is, of course, the \$95,000,000 issue to be opened to competitive bids by American Telephone & Telegraph. There also is to be an auction on the \$14,737,000 refunding issue for the St. Paul Union Depot Co., in line with the recent trend toward competitive bids on the securities of rail terminal properties.

Cutting Charges

Electric Bond & Share joins long list of companies paring interest, dividends with plan to retire block of preferred.

Companies with large holdings of idle cash and easily-salable investments are finding this a propitious time to get rid of some of their most expensive debt and high-dividend senior stocks. Some companies have paid off maturing debt by refunding. Others have arranged for retirement in advance of maturity. Still others are buying in and canceling preferred stock.

Johns-Manville, for instance, for some time has been using its cash to buy in its preferred issue. Pullman stockholders have approved a policy of reducing the capital stock by purchases in the open market. Continental Baking recently bought more than one-third of its 8% preferred through tenders at prices up to \$105 a share, and paid up the back dividends on remaining outstanding senior shares—thus clearing the way to do something for the common stock.

• **Purchases on Curb**—One of the most recent plans is that of Electric Bond & Share Co., vast \$549,000,000 utility holding company. Last week it received permission from the Securities and Exchange Commission to spend \$5,000,000 to acquire shares of its outstanding preferred stocks by purchase on the New York Curb Exchange. Such purchases now may be made at a worthwhile discount from liquidating or redemption price—but at a price sharply higher than before the announcement of purchase intention. The \$6 dividend preferred is selling around \$65 compared with the 1941 low of \$52.

In granting permission for these purchases, the SEC insisted that both the commission and stockholders be kept fully informed about the purchases, that stockholders be told at least two weeks in advance of intention to buy the shares, and that all purchases should be effected on the Curb without personal solicitation before Mar. 3, 1942.

If the company were able to put the entire \$5,000,000 into the \$6 preferred at an average cost of \$70 a share, the annual dividend requirement on this issue would be pared by \$420,000.

THE MARKETS

Inflation Paradox

With inflation talk already rampant, members of the financial community were not surprised to read in their Wednesday morning papers Secretary Morgenthau's statement that "inflation is a distant threat no longer." This simply bore out the conclusion most analysts had drawn from the persistent strength in commodity prices. Yet it rendered even more paradoxical the six-weeks sidewise movement that has taken place in stock quotations.

As a matter of fact, the Standard Statistics index of 50 industrial stocks has declined from 103.3 to 101.2 in the six-weeks period. By contrast, the Moody average of 15 spot commodity prices has risen from 211.7 to 219.9 in the same length of time, a gain of nearly 4%. And the Bureau of Labor Statistics records a rise of a little more than 7% in seven agricultural products.

The uprush in agricultural prices has, of course, highlighted this latest inflation scare. The Department of Agriculture's new plan to boost output of many agricultural products to all-time highs in 1942—accompanied by promise of loans at 85% of parity for all crops included—touched off another sharp rise in commodity markets this week.

Even the big-surplus crops like wheat and cotton were prominent, although they lost some of their gains on Wednesday. Soybeans led the parade with consecutive advances of 8¢ a bushel, the daily permissible limit, on each of the first two days of this week. Wool top futures prices also recorded new all-time highs.

Fear of higher taxes, rising wages, and increasing costs of raw materials (c.i.f.) is overbalancing the normally stimulating effect of inflation talk on equity prices. Yet strong-box investors continue to accumulate selected issues, as is indicated by the price rise of 63 issues listed on the Big Board to new highs for the year on Monday and Tuesday. Only 14 new lows were made on the same days.

As might have been expected, U. S. government bonds sold off after the voiced reminder of inflation.

Security Price Averages

Stocks	This Week	Week Ago	Month Ago	Year Ago
50 Industrial	101.2	102.5	100.3	101.0
20 Railroad	29.4	30.3	30.0	28.3
20 Utility	44.7	45.3	44.9	61.1
Bonds				
20 Industrial	91.3	91.1	91.0	87.4
20 Railroad	64.5	65.6	65.6	58.7
20 Utility	101.6	101.4	101.1	100.7
U. S. Government ..	111.6	111.7*	110.8	108.1

* Revised.

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

Dog's life, A. D. 1941

Running through the smoke of battle, dog scouts can often deliver information, get vital messages through shot-raked country no soldier could cover.

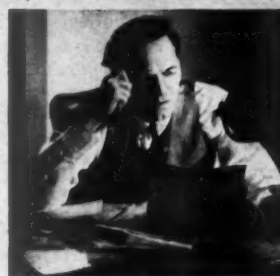
But to do their jobs right, these war dogs must be trained for months. They must be tested under fire. It's a slow, painstaking job—but the only way to be sure of their performance under actual battle conditions.

Now, more than ever, proof of performance is based on test. But testing is slow, costly. And today's emergency calls for speed. So business needs tools proved by actual use.

Certain important tools do meet that need. Among them is Hammermill Bond.

Today, more printers recommend Hammermill Bond than any other watermarked paper. They—and their customers—have confidence in it, because it is pre-tested . . . proved satisfactory by 29 years of use.

25 letters or forms on economical Hammermill Bond cost only 1¢ more than on cheap, unsatisfactory paper.



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BEST WAYS TO MULTIPLY MESSAGES. 1. For type-written work, use Hammermill Bond. Takes typing cleanly, erases neatly, makes clear carbons. 2. On gelatin or spirit duplicators, use Hammermill Duplicator. Gives 300, and more, readable copies. 3. On stencil duplicators, use Hammermill Mimeobond. Makes 3000, and more, clear copies. Check coupon for samples of grades you use.



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BUSINESS ABROAD

War Gives U.S. Two-Front Job

While Washington increases its commitments in Battle of Atlantic, business is getting first clear indications of part we'll be expected to play on Middle East front.

Look for a rapid intensifying of this country's defense production beginning next month. For business, that is the net of this week's developments in the international picture. This is clearly indicated by the President's stand on the Battle of the Atlantic, the aggressive new policy of collaboration with Britain on a vast new front in the Middle East, and the promise of huge quantities of supplies to Russia.

Our New Front

The Battle of the Atlantic held the limelight this week but it is the Middle East that will be the focus of interest during the coming winter. Here the Soviet and British High Commands are laying plans to keep open a vital supply line across Iran to the Russo-German front. Strategy is (1) to keep Germany fighting an active two-front war, and (2) to prevent the Nazis from capturing badly-needed oil fields in the Caucasus, in Iraq, and in Iran.

Here's where United States defense materials—staggering quantities of them—enter the picture. Russia, it is assumed, can provide the trained soldiers

to man its own front lines. To Britain, with its air and naval bases stretching the full length of the Indian Ocean and through the Mediterranean, is left the responsibility for maintaining long supply lines and rushing highly mobile shock troops to trouble spots. But both are depending on the United States to supply the planes, guns, ammunition, and—possibly, in time—even the food and clothing for the men who will fight this Battle of the Middle East. Before it is over, Russian requirements may equal the British.

What Russia Needs

All that Russia will need won't be known until the Averell Harriman mission completes its survey in Moscow, but deliveries are not waiting on that report. Besides the American aviation gasoline which is already beginning to arrive at Vladivostok, and the machine tools being delivered across the Pacific, the United States has already released to the Russians 2,500,000 lb. of aluminum (once earmarked for the French).

Industry's clue to what Russia will need, and in what quantities, hangs on

the outcome of the battles along the Neva and the Dnieper Rivers. Leningrad is apparently already out of the picture as a supply source for the Soviet armies, and it must not be forgotten that this beautiful old capital of adventurous Peter the Great was also the site of Russia's biggest munitions plant and the home of 20% of its machine-tool industry. The urgent appeal for aluminum also indicates how dependent Russia is on the industries of the European section of the Soviet Union. Of the country's 150,000,000 lb. annual aluminum capacity, 30,000,000 came from refineries in and around Leningrad, 75,000,000 from the combinat at Dneprostroy. The country's only other refinery, a big plant at Kamensk in the Urals, is expected to produce 50,000,000 lb. of aluminum this year, hopes to double its capacity next year with American equipment.

Britain Shares Supplies

The planning of this great Middle East campaign is probably being based on the acknowledged loss of a good part of the Ukraine's raw materials and manufacturing plants. Since these accounted for 50% of the country's coal, 60% of its iron ore, 45% of its steel, two-thirds of its aluminum, and the bulk of its machine tools, the size of America's newly-developing supply job takes on tremendous proportions.

Soviet, British, and American planners have already split up their responsibilities according to a definite pattern. Britain, with every plane and tank that comes off home assembly lines assigned to some danger spot within the Empire, will concentrate on providing Russia's second-line factories in the Urals with



FLYING MISSION

General Mikhail Gromov (left) heads the Russian technical mission which flew from the Soviet Union, via Alaska, to Seattle, Wash., last week.



The 47 men arrived in two flying boats purchased from Consolidated Aircraft several years ago. The Russians didn't divulge the purpose of their mission; the rumor is that their urgent needs are for planes, alumi-

num, and machine tools. The experts may also be discussing the plan whereby England would supply raw materials to the U.S., which would turn out the finished products and send them to Britain and Russia.

raw materials. Lead is already being rushed from Burma and Australia; tin from Singapore and Batavia; and copper across Africa by rail for the relatively short, protected haul across the Indian Ocean and up the Persian Gulf to the new trans-Iranian railway.

To the United States is left the responsibility of providing finished defense supplies and machinery which will enable the Soviets to expand production in the protected factories of Turkestan or the Urals.

As London Sees It

So far, Britain apparently is much more conscious than America of the sacrifices likely to be demanded of industry and the public during the coming winter. The London Economist stated the case bluntly in a recent issue:

"In absolute terms the German war effort is still well ahead of Britain's, even if the Empire and the United States are included. The proportion of Britain's total production which is going into the war effort, however, is rising toward the German level. But," soberly declares the Economist, "it will depend on a similar effort on the part of the United States if the democracies are to establish the superiority in absolute defense output necessary to victory."

The same magazine then points out that where nearly 67% of German industrial production is specifically defense material, the comparable percentage in Britain is still less than 45%, while in the United States defense goods account for a bare 15% of total output. Washington has already ordered the speedup. Serious news of further important territorial losses by Russia, unrestricted Axis warfare against lease-lend aid with more sinkings like the Sessa and the Steel Seafarer, and a renewal of Nazi air raids on Britain will point up the urgency.

Britain Yields on Exports

British-American economic cooperation reached a new high this week following a sharp diplomatic tiff in which Washington has finally won its point. This is the outcome of bitter complaints from American manufacturers that they were being forced by the lease-lend program and the growing shortages to curtail exports, even to good customers of long standing in Latin America. When some of these customers managed to get supplies from Britain, a storm broke (BW—Jul.19'41,p60). This week Britain agreed to cut exports to the bone, on threat of curtailed lease-lend deliveries unless every possible defense material be kept at home (1) to avoid useless transport risks and (2) to eliminate such competitive export paradoxes as have arisen under the loose control system for the last two years.

Look for a string of such moves in the next few months, putting all trade



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● Reducing loading and unloading time . . . releasing freight cars sooner . . . utilizing the maximum amount of loading space and capacity are duties which every shipper and receiver must observe if the nation's transportation systems are to meet the tremendous demands now being placed upon them.

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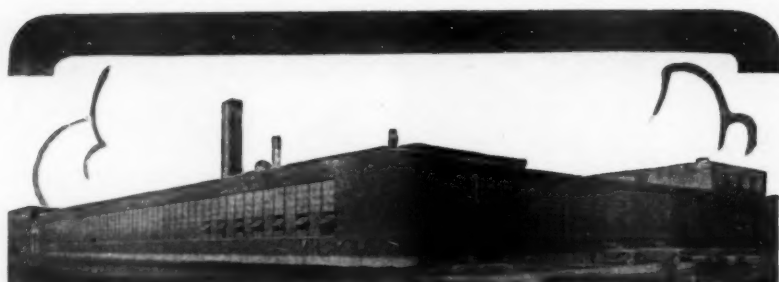
pool car and LCL loadings . . . bundles, cartons, bales, boxes and skid-loads . . . parallel the acceleration of increased production.

Cooperation with the carriers is essential to the defense effort because NO PRODUCT IS A DEFENSE PRODUCT UNTIL IT REACHES ITS FINAL DESTINATION . . . QUICKLY AND SAFELY.



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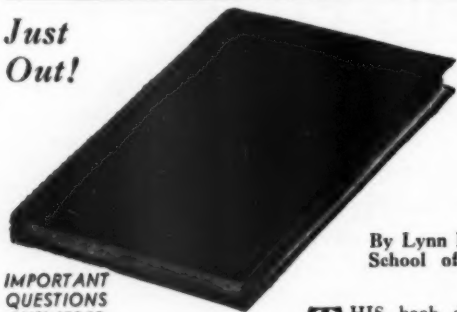
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with Latin America on a rigid control basis and centralizing Canadian and United States production, with control sometimes in Canada and sometimes in the United States. More than 62% of United States exports already are earmarked for the British Empire (compared with a normal 35%-40%). Latin America's share will increase, but never at the expense of Washington's overall defense program.

Drafting for War

Canadians, confident that U.S. will get in war, push plans for overseas conscription and centralization of defense.

OTTAWA—Canadians are looking for rapid-fire developments in the country's defense program as a result of the Mackenzie King conferences in London.

Most spectacular move, and one likely to be announced in the near future, will be Dominionwide conscription for overseas service. Ottawa has avoided any such move until now because of the strong antagonism of the French Canadian population toward participating in any war in Europe; conscription has been confined to the home defense services.

• **Ahead of U. S.**—During the last few weeks, Canadians have become peculiarly sensitive to taunts from south of the border that they are trying to push the United States into the war without having gone as far themselves as should be expected of a nation which is a member of the British Empire and has been technically at war for two years. Now that the public generally believes that the Churchill-Roosevelt conferences in the Atlantic will lead rather quickly toward United States participation in the fighting, Canada is preparing to keep one step ahead, aware, politically, that the reticent Quebec minority can no longer effectively buck the tide. This accounts for the growing belief in Ottawa that full conscription for overseas service is likely to be announced very soon, and that more divisions of Canada's defense production will be integrated with United States output along lines laid down a few weeks ago when tank production in both countries was centralized under the United States War Department (BW—Sep. 6'41, p. 24).

• **Morris Wilson**—There was another indication last week that Ottawa is currying the favor of Washington and building up its prestige as liaison between London and Washington. This was the appointment by London—though obviously at the suggestion of Canadian officials—of Morris Wilson, president of the powerful Royal Bank of Canada, as successor to the late Arthur Purvis as



As the new chairman of the British Supply Council in Washington, Morris Wilson, president of the Royal Bank of Canada, becomes the world's biggest buying agent—responsible for all Britain's purchases in the U. S.

head of the British Supply Council in North America with headquarters in Washington. Though Mr. Wilson has been in the United States for many months as deputy chairman of the council, he was undoubtedly chosen instead of an Englishman because of his familiarity with United States industry and with Washington. And London undoubtedly believes that a Canadian on the job will help to stimulate confidence in the procurement program.

• **Huge Wheat Carryover**—Canadian wheat farmers received a flash of good news this week when the government revealed that flour exports are running 50% ahead of last year because of heavy demand from Britain and the greater safety of shipments over the North Atlantic during recent months. But the encouraging news about flour exports failed to hide a generally-alarming wheat carryover picture. Despite an acreage cut of more than 22%, and reduced production caused by the extreme drought of July and August, Dominion wheat output this year amounted to about 275,000,000 bu. Canada's stored wheat from previous bumper crops still will amount to 750,000,000 bu., from which the Canadian farmer and the housewife will draw less than 150,000,000 bu. during the coming year. That leaves the Dominion with 600,000,000 bu. for which storage space must be found.

• **Canadian Income Tax Plan**—Canadians' taxes on their 1941 incomes will fall due on Mar. 31, 1942, a month earlier than formerly. Taxpayers have been forewarned that they may be shocked by the amounts they must pay (for instance, \$350 tax on a \$3,500 in-

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come for a married couple without dependents). Because, as the Minister of Finance has pointed out, many can no longer hope "to find the tax money in a month or two in the spring," the Dominion government is offering to accept monthly instalments, starting in September, under this plan:

An amount equal to one-twelfth of the tax paid on 1940 income is to be paid in each of the four months from September to December, inclusive. This is to be applied to the 1941 income tax, which typically cannot be determined until the year ends. After 1941 income is known and the tax computed, the total of the instalments already paid is subtracted from the amount due and the remainder is payable in eight equal monthly instalments, from January to August, 1942, inclusive.

A major difference between this system and the use by the United States Treasury of tax anticipation bonds is that the Canadians receive no interest for early payment. Failure to make even one monthly payment on time makes the Canadian liable to the government for interest on the balance unpaid after Mar. 31, 1942.

Wings over Brazil

Three new airlines to tap rich resources of the interior of Brazil, which United States is helping to develop.

Down the lush, forest-covered coast of Brazil during the last few months giant grading machines and swarms of men have been carving six huge military airports out of the tropical jungles which line the "bulge" of South America only 1,800 miles across the Atlantic from Africa and the worrisome French-German base at Dakar (map, page 84). Brazil is building the bases but the money and much of the equipment being used have come from the United States as a part of the new hemisphere-defense program.

Less spectacular, but of far greater direct interest to United States business is the recently-inaugurated air-expansion program toward Brazil's vast, unexploited interior which the Rio de Janeiro government is pushing with the full cooperation of Washington and the Pan American Airways system.

• **Air Pioneers**—Three new airlines are being established to open up the country. Planes started flying over the first route—up the Amazon Valley to Tabatinga on the border of Peru—as long ago as June 16.

Probably the most important of the three new routes was flown for the first time in late July when Panair do Brasil (Brazilian subsidiary of Pan American

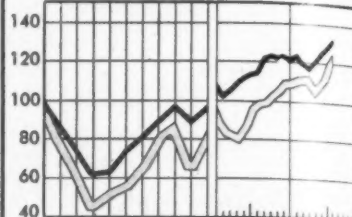
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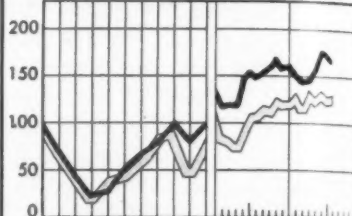
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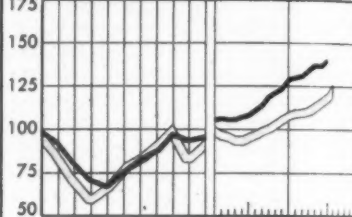
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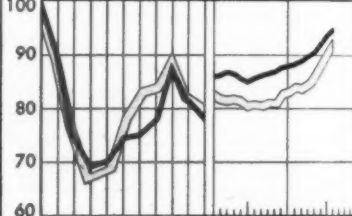
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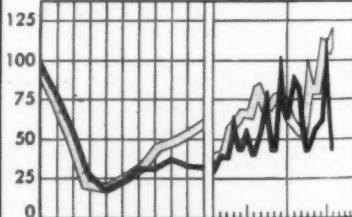
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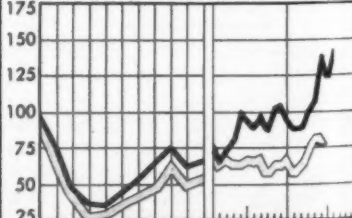
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Airways) planes started regular flights from Rio to Corumba, on the Bolivian frontier, where they make connections with the Pan American-Grace Airways to create a regular 2,660-mile transcontinental air service—almost exactly the length of the United States transcontinental routes—between Rio and the Pacific ports of Arica and Lima (map, page 84). Panair planes continue south from Corumba to Asuncion, isolated capital of Paraguay, and then back to Rio by way of Curitiba and São Paulo.

The third route—from Rio to Goiana through the richest mining region in all Brazil—will begin operations this month.

• **Amazon Riches**—Only the last 960 miles of the Amazon route, from Manaus to Tabatinga, and the branch service from Manaus to Porto Velho are actually new, though service on the lower Amazon was put on a regular schedule and speeded up only recently. It is out of this vast, swampy jungle region that President Vargas believes that he can get the rubber, vegetable oils, wax, cinchona bark (from which quinine is made), and tropical wood which will help Brazil to replace the southeastern part of Asia as a source of supply for the United States. Ford already has large rubber plantations up the Amazon.

• **Minerals Reservoir**—But it is along the two new routes in the south that some of the most spectacular raw-material sources are likely to turn up. From this region, near the coast, Brazil already gets 30% of its livestock, 88% of its minerals, and 75% of its coffee. It includes less than 11% of the total area of Brazil (which is larger than the United States), but has 45% of the country's total population and Brazil's two greatest cities—Rio and São Paulo.

Brazil's great mineral wealth makes the country a natural reservoir for metallic and non-metallic minerals vital to United States defense industries. Two experts—S. R. Capps and W. D. Johnson, Jr.—have already arrived from Washington to survey the country's mineral resources. Especially needed are black diamonds (for the tool-cutting industry), mica (for spark plugs, magnetos, and radios), manganese, bauxite (for aluminum), chrome, and iron oxides. Brazil also is known to have deposits of antimony, beryllium, copper, nickel, platinum, tin, tungsten, vanadium, zinc, and some of the finest rock crystal in the world (for lenses). Lack of capital and necessary equipment for exploiting deposits, and the country's inadequate transportation system have hampered the country in its efforts to fill quickly the defense needs of the United States.

• **Biggest Iron Reserve**—Brazil has one-quarter of the world's known iron reserves, with metallic content as high as 70%. Most of these reserves—totaling 15,000,000,000 tons—are untouched. Manganese, though shipments to the United States have doubled during the

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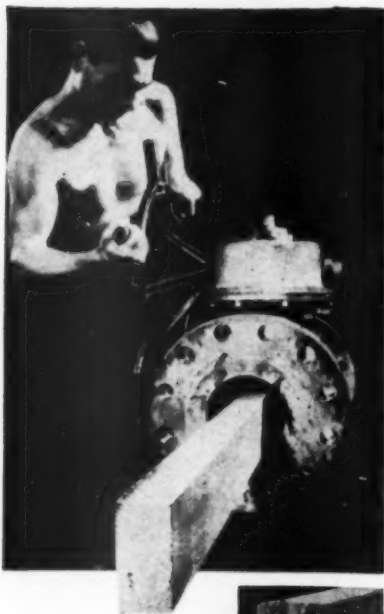
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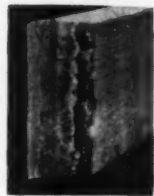
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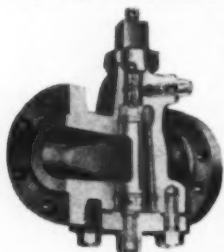
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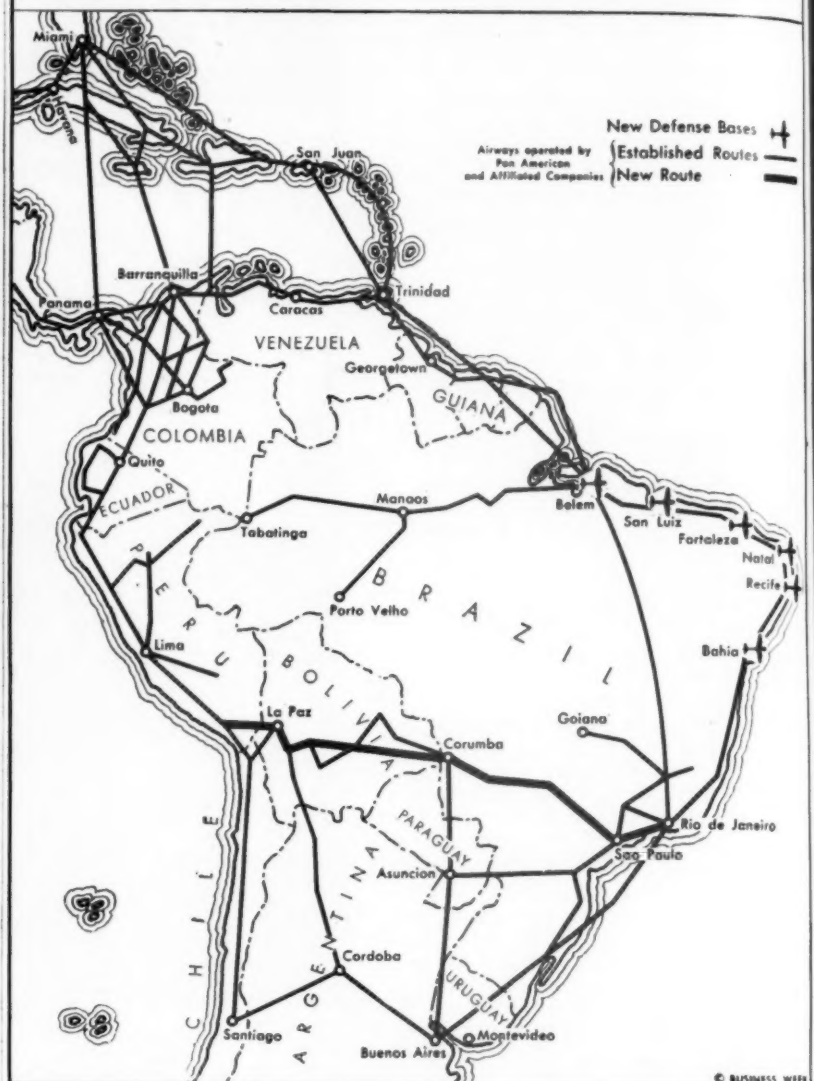


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NEW FRONTIERS—FOR TRADE AND DEFENSE



last year, is also underdeveloped. In January of this year, the United States bought 33,000 tons, is ready to buy much more if Brazil can produce it.

Eighty deposits of bauxite, now badly needed by the defense industries, have been found in Brazil, although few of them have been exploited. Faced now with a critical shortage of aluminum, the Rio government has decided to set aside sufficient funds to establish an aluminum reduction plant during 1942. Reserves of bauxite in Brazil are estimated at 120,000,000 tons, but of these only 7,000,000 have been studied. Transportation difficulties have kept production down to 6,000 tons a year, but to meet the present emergency, production next year will be boosted to 30,000 tons.

Within this hemisphere, only Cuba produces more chrome ore than Brazil. Exports rose from 934 tons in 1938 to

3,754 in 1939, with Germany taking the entire output. But in 1940, the United States took 4,064 tons, and Germany purchased only 508, none of which got through the blockade. Exposed chrome ore in the state of Bahia is estimated to amount to 400,000 tons. • **What It Means**—To Brazil, Pan American's three new air services mean pushing the frontiers far to the west, opening up a new transcontinental passenger and mail service with important West Coast neighbors, and preparing the way for the rapid exploitation of rich resources in the interior.

To the United States, the program is but another step in Washington's rapidly developing plans to help all of Latin America become economically less dependent on Europe and a source of supply for many raw materials needed in our own defense program now or in industry after the war.

PROFIT & LOSS

Is This a System!

You'd think the Tokyo government was just a big old soft-hearted slob, to cut the price of ice-cream sodas from 20 to 13 yen the way it did recently. As a matter of sober fact though, it's a crafty way of discouraging retailers from selling such luxuries as sodas—by putting the price below cost.

Batch of Cookies

The Westinghouse Electric & Manufacturing Co., with more than half its production devoted to defense work already, this week added cookie-baking to its defense activities. The home economics department of the Mansfield, Ohio, Westinghouse plant is hard at work now on a batch of 12,000 cookies to be sent to the 500 employees of the company who are serving in Army camps. Each of the boys is going to get two lb. of cookies, made up of two dozen samples of the favorite recipes of Mrs. Kiene, manager of the home economics department. These include fudge bars, mystery bars, grandmother's fruit bars, oatmeal drop cookies, and Chinese chews—and they weren't chosen at random either. Those are supposed to be the kinds of cookies men like best. Westinghouse knows, because it thoroughly tested the cookie preferences of a committee of five men at the Mansfield plant before taking any irrevocable steps. This sounds like the kind of defense effort there ought to be more of. If Westinghouse can make cookies, there doesn't seem to be any reason why General Motors couldn't whip up a one-egg cake or two for the boys—and we wouldn't be a bit surprised if United States Steel turned out to be a wizard at apple pies.

Hollywood Department

The Southern California Dental Association chose Miss Brenda Joyce's teeth as the most beautiful in Hollywood.

And the United Doll Novelty and Toy Workers Union took a poll and chose Miss Nancy Kelly as their ideal of the "most beautiful doll." "Her beauty and gorgeous figure would make the most superlative product any of us ever turned out as a doll," the overcome workers said.

Nocturne

It's been a long time coming, but the cosmetic manufacturers have finally evolved a makeup schedule which runs completely around the clock. For years the industry has concentrated on what

"TAKE IT UP" with R & M



"Have a cigar, Jim. Production is certainly moving along since you sold me on those R & M hoists."

2000-lb. capacity R & M electric hoist, "steel-built" from track to hook. One of the many R & M hoists, up to 15,000-lb. capacity; push-button control, wide choice of speeds, low headroom.

Actual problem—production had to be stepped up in a leading Mid-western machine-manufacturing plant. More man power was added . . . more equipment installed. Still, output lagged.

An R & M expert, working with the plant engineer, spotted the trouble. Old-type chain hoists were sapping man-efficiency, log-jamming heavy castings and steel bars all along the line.

Three R & M electric hoists were recommended . . . and here's what the cost chart shows:

- The R & M hoists are handling material 80% faster.
- There is a decided increase in man-efficiency due to less muscle strain and fatigue from chain-hoist lifting.
- Not one dime has been spent for maintenance or repairs . . . not one minute lost in service since the hoists were installed.
- The R & M hoists paid for themselves within six months in savings made and in increased output.

Whatever your hoist and crane problem may be, it will pay you to "take it up" with R & M. Two thousand standard types are offered, from 1/4-ton bantams to 10-ton huskies—all built from the ground up, and motored, by R & M.

Phone nearest R & M sales and service office, listed in your classified directory. Or write factory direct for further details.

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ADVERTISERS IN THIS ISSUE

Business Week—September 13, 1941

ACME STEEL CO. 79	THE B. F. GOODRICH CO. 1
Agency—THE BUCHAN CO.	Agency—THE GRISWOLD-ESHELMAN CO.
AMERICAN HOT DIP GALVANIZERS ASSOCIATION, INC. 54	HAMMERMILL PAPER CO. 77
Agency—THE ALBERT P. HILL CO., INC.	Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.
AMERICAN INTERNATIONAL UNDERWRITERS CORP. 47	A. L. HANSEN MANUFACTURING CO. 40
Agency—PARKER-ALLSTON ASSOCIATES, INC.	Agency—J. M. HAGGARD, ADVERTISING
THE AMERICAN PULLEY CO. 28	HARTFORD FIRE INSURANCE CO. 53
Agency—THE AITKIN-KYNETT CO.	Agency—NEWELL-EMMETT CO., INC.
AMERICAN TELEPHONE & TELEGRAPH CO. 12	HERCULES POWDER CO., INC. 63
Agency—N. W. AYER & SON, INC.	Agency—FULLER & SMITH & ROSS, INC.
ANACONDA WIRE & CABLE CO. 31	J. M. HICKERSON INC. 54
Agency—LORD & THOMAS	Agency—J. M. HICKERSON INC.
ANCHOR POST FENCE CO. 72	THE HINDE & DAUCH PAPER CO. 33
Agency—VAN NANT, DUGDALE & CO., INC.	Agency—HOWARD SWINK ADVERTISING AGENCY
ARMSTRONG CORK CO. 64	HOTEL PLAZA. 68
Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.	Agency—WHITE-LOWELL CO., INC.
ASSOCIATION OF PREFORMED WIRE ROPE MANUFACTURERS. 46	HUNTER ELECTRO-COPYIST, INC. 70
Agency—BRINCKE-ELLIS-YOUNGBLANK & FINN, INC.	Agency—BARLOW ADVERTISING AGENCY, INC.
THE AUSTIN CO. 44, 45	THE INTERNATIONAL NICKEL CO., INC. 9
Agency—FULLER & SMITH & ROSS, INC.	Agency—MAHSCHALK & PRATT, INC.
BANKERS FOR INDUSTRY. 74	WALTER KIDDE & CO. 75
BENEFICIAL INDUSTRIAL LOAN CORP. 54	Agency—T. J. MALONEY, INC.
Agency—ALBERT FRANK-GUNTHER LAW, INC.	KIMBERLY-CLARK CORP. 29
BIRDSBORO STEEL FOUNDRY & MACHINE CO. 59	Agency—LORD & THOMAS
Agency—BEAUMONT, HELLER & SPERLING, INC.	LOEW'S, INC. 68
L. L. BROWN PAPER CO. 61	Agency—DORRANCE & CO.
Agency—WILLIAM B. BEMINGTON, INC.	MARCHANT CALCULATING MACHINE CO. 49
BUNDY TUBING CO. 3	Agency—BRIBACHER, DAVIS & STAFF
Agency—BROOKER, SMITH, FRENCH & DORRANCE, INC.	MARYLAND METAL BUILDING CO. 70
THE PHILIP CAREY MANUFACTURING CO. 80	Agency—THE EMBRY ADVERTISING CO., INC.
Agency—THE B. C. BARR CO.	McGRAW-HILL BOOK CO., INC. 60, 80
CARRIER CORP. 21	MERCO NORDSTROM VALVE CO. 84
Agency—CHAR. DALLAS BEACH CO.	Agency—THE MCCARTY CO.
CELLULOSE CORP. 25	MODINE MANUFACTURING CO. 43
Agency—THE AITKIN-KYNETT CO.	Agency—THE CRAMER-KRARELT CO.
CESSNA AIRCRAFT CO. 4th Cover	MONROE CALCULATING MACHINE CO. 3rd Cover
Agency—THE MCCORMICK-ARMSTRONG CO.	Agency—ALLEY & RICHARDS CO.
THE CINCINNATI TIME RECORDER CO. 40	MOORE PUSH-PIN CO. 54
Agency—FREDERIC W. ZIV, INC.	Agency—EARLE A. BUCKLEY AGENCY
COCA COLA CO. 26	OLD TOWN RIBBON & CARBON CO. 73
Agency—D'ARCY ADVERTISING CO., INC.	Agency—ADVERTISING ASSOCIATES
CYCLONE FENCE CO. 4	PANGBORN CORP. 73
Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.	PITNEY-BOWES POSTAGE METER CO. 76
THE DELTA MANUFACTURING CO. 48	Agency—L. E. MCGIVENA & CO., INC.
Agency—IRVING J. ROSENBLUM ADVERTISING CO.	PITTSBURGH CORNING CORP. 67
DICTOGRAPH SALES CORP. 40	Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.
Agency—ROY S. DURSTINE, INC.	PORTLAND CEMENT ASSOCIATION. 71
DODGE DIVISION, CHRYSLER CORP. 37	Agency—ROCHE, WILLIAMS & CUNNINGHAM, INC.
Agency—ROSS ROY, INC.	REPUBLIC RUBBER DIVISION
EDIPHONE, THE. THOMAS A. EDISON, INC. 32	LEE RUBBER & TIRE CORP. 2
Agency—FEDERAL ADVERTISING AGENCY, INC.	Agency—WEARSTLER ADVERTISING, INC.
ELECTRIC CONTROLLER MANUFACTURING CO. 68	ROBBINS & MYERS SALES, INC. 85
Agency—THE BAYLESS-KERR CO.	Agency—ERWIN, WARE & CO., INC.
ELECTRIC STORAGE BATTERY CO. 6	SHELL OIL CO. 23
Agency—GRABER-MARSTON, INC.	Agency—J. WALTER THOMPSON, INC.
ENGINEERING NEWS-RECORD. 55	SKILSAW, INC. 87
ETHYL GASOLINE CORP. 39	Agency—EARLE LUDGIN, INC.
Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.	SOCONY-VACUUM OIL CO., INC. 2nd Cover
FAIRBANKS, MORSE & CO. 10	Agency—J. STIRLING GRETCHILL, INC.
Agency—HENRI HURST & McDONALD, INC.	SUGAR BEET PRODUCTS CO. 30
FELT & TARRANT MANUFACTURING CO. 19	Agency—SEEMANN & PETER, INC.
Agency—N. W. AYER & SON, INC.	SWING-O-RING CORP. 30
FIRST TRUST & DEPOSIT CO. 74	Agency—LEWIS & TOKAR, INC.
Agency—THE LANE AGENCY	THE TEXAS CO. 5
FLEUR-O-LIER MANUFACTURERS. 51	Agency—NEWELL-EMMETT CO., INC.
Agency—FORBES & DAVIES, INC.	TODD CO., INC. 57
THE FOXBORO CO. 62	Agency—THE MERILL ANDERSON CO.
Agency—HORTON-NOYER CO.	UNDERWOOD ELLIOTT FISHER CO. 83
FRICK CO. 40	Agency—MAHSCHALK & PRATT, INC.
Agency—WATKINSON ADV. AGENCY	UNITED AIRCRAFT CORP. 41
THE FRIDEN CALCULATING MACHINE CO., INC. 72	Agency—PLATT FORBES, INC.
Agency—D'EVERLYN & WADSWORTH, INC.	WESTINGHOUSE ELECTRIC & MFG. CO. 54
FRUEHAUF TRAILER CO. 69	Agency—FULLER & SMITH & ROSS, INC.
Agency—SCHIFFER ASSOCIATES	WHITING CORP. 81
	Agency—THE FENHOLT CO.
	WILLSON PRODUCTS, INC. 58
	Agency—JAMES G. LAMB CO.
	YORK ICE MACHINERY CORP. 34, 35
	Agency—J. M. MATHIE, INC.

a girl should wear on her face at breakfast, how to make the transition to lunch, what to do about looking right at the matinee, how to bowl the boys over at cocktails, what to put on the face to look dressed for dinner, and how, finally, to be the hit of the evening with the correct application of the correct cream.

The industry always stopped there though, figuring it was about time for bed anyway. Now Schiaparelli has rushed into the breach, and filled the crying need for a cosmetic product for the girl who wants to stay up all night and still look ravishing when the sun comes up. Schiaparelli tells its own story:

"Schiaparelli, who first made cosmetic history with a night lipstick (Shocking) now comes forward with a new series—Sleeping—in two evening shades: Sunset and Sunrise—each as distinctively original as their forerunner. Definitely for the pleasure-bound, these new shades are meant for alluring hours when good folks sleep and only night owls prow. Sunset is dark and luminous. At a first night it will outwit footlights and defeat the shadows. But when the first streaks of dawn filter through and it's time to call a taxi, Sunrise—a vivid, luscious shade—will save you from that wan and spooky look we all know so well. Each is faintly fragrant with Sleeping perfume. And amusingly enough, each comes in a Sleeping blue case, shaped like a burnt-out candle."

At both ends, we hope.

Revival

Cigar manufacturers these days are apparently dividing their time between celebrating the current boom in cigar-smoking—and trying to figure out what's causing it.

The Cigar Institute of America says more cigars are being smoked this year than in any year since 1920—and 1920 represents the peak of the demand. It admits the economic upturn has something to do with it, but can't use that to explain why cigar consumption is so high in the Army camps. It thinks there's something to the explanation that leaders like Winston Churchill, William S. Knudsen, Fiorello La Guardia, Frank Knox, and Phil Murray are setting the fashion. And it says women have a lot to do with it because they are "becoming more cigar-conscious . . . seeing to it that cigars are provided for home hospitality as in the time of their parents," and that "the cigar is . . . the final touch to the home dinner."

Whatever the reason though, it's a great year for cigars, and while nickel cigars are up slightly, and ten-centers and two-for-a-quarters are up slightly more, the biggest increases of all are in the fifteen-cent-and-over jobs. That must mean something very significant.

THE TRADING POST

"Management in Transition"

The annual report of the American Management Association bears on its front cover the very timely and significant legend "Management in Transition." And in his foreword to the report, Alvin E. Dodd, president of the association, gives us a glimpse of what is behind that legend. These extracts may be pondered with profit by men of management in any field of business:

Since a year ago, when the last annual report of the AMA was published, something has happened to change management; some may call it the end of "business as usual," others may call it "emergency management," but it is a deeper and more subtle change than these phrases suggest; rather, it is the birth of a new spirit and a new philosophy. Indeed, to anyone who reviews management problems as they have been dealt with in AMA meetings and publications, it becomes apparent that management is in the throes of a great and difficult transition.

For many years prior to 1940-1941, management was schooled in the ways of conservatism and conservatism as contrasted to the philosophy of dynamic expansion and production that had been our background of years ago. Indeed, a large part of our present-day executive personnel received its training in the deflationary era of the '30's.

But now, almost overnight, this approach to management has changed. Our problem is no longer that of intensively developing markets and producing the proper amount of goods at the lowest possible cost to fill the markets' expected demand. Instead, we are asked to apply our most dynamic techniques to the mass production of all the goods we possibly can, and in the shortest possible time.

As all managers know, this transition is not an easy one. There had been little previous conditioning for the change, so it is not surprising that we are encountering a multitude of difficulties. This is not to say that progress is not being made; rather, we are making more progress than is popularly realized. But we are working under great handicaps, and until we can overcome them, we shall not be able to bring the full power of American industrial genius to bear upon the task that the defense program presents.

Looking backward, Mr. Dodd points out that—

While it is true that during the first World War we produced armaments in vast quantity, much of which never reached the fighting fronts, we returned as quickly as possible when the war was over to the manufacture of peacetime goods. In contrast with the situation in many European countries, there has been no continuity in American munitions production. When World War I was over our armament plants were scrapped while those in other nations were not: Germany had its Krupp works, England its Vickers, Czechoslovakia its Skoda plants, etc. At the time that the

present war broke out, all these had been manufacturing arms at great speed, while we only began our efforts at a comparatively recent date.

Therefore, the Axis propagandist is right when he calls us manufacturers of washing machines, automobiles, cigarettes, radios and telephones. Of course, he omits plowshares, tractors, and locomotives. But the essential import of his assertion is correct. Ours has been strictly a consumers' economy, and we know how to make such goods better than any nation on earth. But now skill in peacetime pursuits has lost its importance; it is no longer guns and butter, but simply guns, and war materials to back up guns. What we are really trying to do today is change the course of the mighty American stream of consumers' goods. Few of us, even those in management, appreciate the momentum that this stream has attained, nor can we really appreciate the size of our own industrial system, for it is ramified beyond the comprehension of any one individual and its power is so great that we have never dared to open the floodgates all the way. To change all this is to attempt a feat of truly staggering proportions.

Turning toward the future, he concludes—

History has a favorite trick that it persists in playing again and again. It rarely permits the full import of great events to be appreciated by those living at the time the events occur. It saves the effect for generations that come after those living have passed away. History is again playing that trick. We know that there is a storm over the world and that it is blasting familiar landmarks of the earth into new forms; we know the storm is taking a fearful toll of men's lives and that it is costing much in terms of what men have created and hold priceless. But changes more subtle and more profound are taking place. It is almost impossible for us to estimate the reverberations of the present world struggle. Only this we know: That, whoever wins the war, the world in which contemporary leaders have arisen is passing, and the leaders of tomorrow will rise in a much different world.

Only the most ardent optimist can look forward with any degree of cheerfulness to the future. Implied in all we are now doing is the promise that we are some day going to be "in for it." Yet, as has been impressed repeatedly upon members of the Association by defense officials, management cannot permit its fears for the future to interfere with present progress. The "all-out" spirit of national defense permits of no such reservations.

For managers, themselves, however, there should be comfort in the realization that no matter what the post-war world is like, there will be a place in it for them, because there is always work for management; managers are always needed, their industrial genius can win wars, and it can also enable the country to survive the economic derangements that follow wars. But it seems probable that the greatest challenge that this genius has yet faced is to come when this World War II ends.

W.C.

SKILSAW ELECTRIC TOOLS

MAKE AMERICA'S HANDS

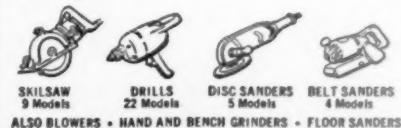
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SKILSAW BELT SANDERS are light, easy to handle, perfectly balanced for even pressure on entire surface. Work from light socket. 4 powerful models . . . belt widths from 2¼ to 4½ inches. Ask your distributor to demonstrate them on your own work.



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SKILSAW TOOLS

PORTABLE ELECTRIC

Built by SKILSAW, INC., CHICAGO

Sold by leading distributors of hardware and industrial supplies

THE TREND

"GOOD NEIGHBOR" MUST WORK BOTH WAYS

The little Republic of Haiti last week offered the world an example of what Uncle Sam's Good-Neighbor policy can accomplish when it begins to work in two directions.

Investors in the United States hold nearly \$8,000,000 of Haitian bonds on which interest payments are due at the beginning of each April and October. When last April's payment fell due, the Haitian government didn't have funds enough to cover the full amount and requested the Foreign Bondholders Protective Council in New York to agree that one-third of the amount falling due in April and October, 1941, be postponed, the coupons to be stamped as having received the two-thirds payment and then returned to the bondholders. The Apr. 1 coupons were paid on that basis.

• Since spring, however, Haiti's financial position has improved rapidly because of rising coffee prices. Coffee is the country's leading crop and regularly accounts for nearly three-fourths of the republic's exports. Since export taxes, as in many Latin America countries, are a major source of government revenue, the price jump from 6¢ to 9¢ a pound on Haitian coffee in the last five months produced enough fresh revenue not only to cover the October interest but to allow the Port au Prince government to make up the April deficit.

But there's more behind this episode than appears on the surface. On July 1, the United States revealed that it has decided to make Haiti one of its important new rubber supply sources, and outlined a plan to plant 60,000 acres of rubber trees in the little republic. Also to help cut the island's dependence on a single crop—coffee—Washington agronomists will supervise the establishment of large banana plantations, and the growing of a great variety of food crops for local consumption. It is because Haitian officials appreciate the value of this large-scale and long-term cooperation that they have acted so promptly to meet their financial obligations in the United States.

• There is a lesson here for some of the other countries in Latin America whose enthusiasm for Good-Neighbor principles runs high when Uncle Sam shows a willingness to bail them out of trouble but which are quick to cry "Shylock" when, after the tide has turned, he asks for a repayment of the debt. And there's a lesson for Washington, too, unless it wants to be dubbed a sucker by some not-so-good neighbors to the South.

Coffee, which was the crux of the Haitian situation, raises the kind of problem which will test our whole plan of hemisphere cooperation. Some time ago, Washington price planners hinted that 11¢ a pound was enough to pay for green coffee. This compares with a low of 5½¢ a year ago. But Brazil and Colombia, producers of four-fifths of the world's coffee, have, so far, shown no willingness to cooperate and green coffee now

is selling in New York at around 13½¢. OPA and the State Department have their heads together and there are whispers that the United States will jack up its coffee import quotas in favor of Central American producers, but, so far, nothing has happened. Prices are still rising; both Colombia and Brazil are benefiting from huge United States purchases of coffee and many other raw materials; and there's not a hint from either country about resuming payments on defaulted debts.

• Washington's plans are running into trouble in other lines due to lack of cooperation from Latin America. In Argentina the problem is hides. The United States has set a 15¢-a-pound ceiling on hides but at the end of last week sales were made in the Argentine at a price equal to about 15½¢ on a New York delivery basis. Argentina was saved from an economic crisis caused by the wartime loss of her big European markets only by the quick action of the United States in jumping into her market to buy wool and hides, and to make deliveries possible on the huge tinned meat orders placed by the British defense forces. And the United States, last great market open to the Argentine, took 36% of the country's exports in the first seven months of this year, compared with a bare 14% a year ago. Washington has the power to force a compromise, if it comes to a showdown, just as it does in Cuba—where sugar interests are holding out for better prices, or in Chile where the government has chosen the present moment of acute copper shortage to protest this country's 12¢ price ceiling.

• Washington's hemisphere program is at a turning point. Up to this time practically all of the concessions it has demanded have been made by the United States. Argentina has benefited from loans and huge wool purchases; Brazil from credits to build a steel industry, aid in exploiting vast internal riches (page 82); Mexico from steady absorption of surplus silver, lead, and zinc.

But the time has come now when there must be evidences of good faith on the other side, like little Haiti's friendly gesture last week. Shortages and priorities, the tightening dragnet of economic warfare, and the scarcity of ships will continue to harass business in all countries until the war ends. The United States, with its tremendous economic and military power, can withstand the crisis better than the smaller and economically less self-sufficient countries of Latin America. Indeed, this very power makes it possible for us to force our will on them if they won't cooperate willingly.

The test of Washington's hemisphere program will come during the next twelve months. It will succeed only if the administrators know when to be tough as well as when to be lenient.

The Editors of Business Week

Business Week • September 13, 1941

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